# Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

### Sacramento River Basin

RD1500	Overall LMA	Total LMA		Threshold Perce				
Reclamation District No. 1500 Sutter	Rating	Miles	however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.					
Basin	M *	53.87	Design				Design 8	& System
Rated Item			nce Deficiancy			ement	Obsole	scence
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee	4 77		4.77	2.200/	0.00		I	
Vegetation	1.77	0.04	1.77	3.29%	0.09			
Trim / Thin Trees	0.02	0.01	0.06	0.11%				
Encroachments	0.06		0.06	0.11%	4.77	0.01		
Animal Control	0.07	0.04	0.23	0.43%				
Erosion / Bank Caving	0.03		0.03	0.06%				
Underseepage Relief Wells		0.01	0.04	0.07%				
Supplemental	4.40		4.40	0.040/			I	
2015 USACE Erosion Survey, DRAFT	1.10		1.10	2.04%				
DWR UCIP Field Study					0.48	0.01		
LMA Totals:	3.05	0.06	3.29	6.11% *	5.34	0.02	0.00	0.00
Unit No. 01 Sacramento River LB	Overall Unit Rating	Total Unit Miles			ercent is less than 10.00%; however, at, so the Overall Unit Rating is M			
RD1500	M *	33.15	instead of A.					
		Maintena	nce Deficiancy		Enforcement Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee	IVI IVIIIOO	O WIIIOO	10 10 10 10 10 10 10 10 10 10 10 10 10 1	Tilloonola 70	101 1011100	C IVIIIOC	141 1411100	C IVIIIOC
Vegetation	1.77		1.77	5.34%	0.09			
Trim / Thin Trees	0.02	0.01	0.06	0.18%				
Encroachments	0.03		0.03	0.09%	4.77	0.01		
Animal Control	0.07	0.04	0.23	0.69%				
Erosion / Bank Caving	0.03	****	0.03	0.09%				
Supplemental	0.00		0.00	0.0070				
2015 USACE Erosion Survey, DRAFT	1.10		1.10	3.32%				
DWR UCIP Field Study					0.48	0.01		
Unit Totals:	3.02	0.05	3.22	9.71% *	5.34	0.02	0.00	0.00
	1							
Unit No. 02 Sutter Bypass RB	Overall Unit Rating	Total Unit Miles	U Rated Miles are present, so the Overall Unit Rating is M					
RD1500	M *	20.72	instead of A.					
5 / 15		Maintena	Maintenance Deficiancy Enforcement			k System scence		
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles		U Miles
Earthen Levee								
Encroachments	0.03		0.03	0.15%				
	1							
Underseepage Relief Wells	ı	0.01	0.04	0.19%				

# **LMA District Cover Sheet**

## Fall 2016 Levee Inspection Results

# **Reclamation District No. 1500 Sutter Basin**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)			
† Overall LMA Rating (Fall Only)			M *				
	** Non-receipt of Summ Reports may effect o		* Overall LMA Threshold 10.00%; however, U Ra so the Overall LMA Ra	ated Miles are present,			
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.  FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.							
Comments							

## **Unit Cover Sheet**

## Fall 2016 Levee Inspection Results

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Left	33.15

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	3/9/2016 - 3/10/2016		9/20/2016 - 9/21/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By			George (Wade) Wylie	

<sup>\*</sup> Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start		Rating **	Α	Issue No.		9	
LM End		Issue Type +	Ма	Location *	N/A		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		s & Maintenai	nce		0		0
item	Manuals				0		0
DWR ID	DWR ID DWR_RD1500_01_s _ 2013_9						
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
RD 1500 h	RD 1500 has their O&M Manual.						

No Photos

LM Start		Rating **	Α	Issue No.		55	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	de/Longitude	
Calegory				Start		End	
Emergency Supplies &				0		0	
пеш	Equipmen	ıt			0		0
DWR ID	DWR_RD1	500_01_s _ 201	13_55				
		Comn	nent Cod	de			
	Inspector Comment						
RD 1500 n	2D 1500 maintains a stocknile of flood response material						

No Photos

LM Start		Rating **	Α	Issue No.		61		
LM End		Issue Type +	Ма	Location *		N/A		
Category	Earthen L	evee		GPS La	atituc	de/Longitude		
Calegory				Start		End		
Item	Flood Pre	paredness &	Training		0		0	
item					0		0	
DWR ID	DWR_RD1	500_01_s _ 201	3_61					
		Comn	nent Cod	le				
	Inspector Comment							
RD 1500 is current with it's flood response plans and training.								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	0.07	Rating **	М	Issue No.		137
LM End	0.07	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		38.7610	77°	38.761077°
iteiii						-121.675851 °
DWR ID DWR_RD1500_01_f _ 2016_137						
		Comn	nent Cod	de		
T1 : Trim t	rees to at I	east five feet	above g	round level.	•	
		Inspecto	or Comm	nent		



A tree on landside slope needs trimming. Fall 2016.

LM Start	0.19	Rating **	С	Issue No.		126	
LM End	0.19	Issue Type +	Ma	Location *		LS	
Earthen Levee			GPS La	atitud	le/Longitude		
Calegory	Category			Start		End	
Item	Trim / Thi	n Trees		38.7616	50°	38.761650°	
item				-121.6779	50°	-121.677950°	
DWR ID DWR_RD1500_01_s _ 2016_126							
Comment Code							
T1 . Trim t	T1 . Trim trace to at least five fact shows ground level						

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

Tree branches are broken and on the levee slope.

No Photos

LM Start	0.19	Rating **	М	Issue No.		136	
LM End	0.19	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category			Start		End		
Item	Encroachi	ments		38.7616	78°	38.761678°	
item				-121.677946°		-121.677946 °	
DWR ID	DWR_RD1	500_01_f _ 201	6_136				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			



Prunings on landside slope. Fall 2016.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	0.31	Rating **	М	Issue No.		2583	
LM End	0.31	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.7632	10°	38.763210°	
пеш				-121.6790	17°	-121.679017°	
DWR ID							
	Comment Code						

# Inspector Comment

FS\_ID:28183 DS\_ID:20032 EP\_NO: 1566A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil erosion around headwall on waterside.- pump

was removed .- overhead powerline.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation pipe through levee, 5.0 feet below crown. Pump and switch panel on waterside berm. Service pole on waterward shoulder. Siphon breaker on landward slope. A 3-foot by 4-foot concrete distribution box at landward toe (App. No. 1566A White) O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014

LM Start	0.31	Rating ** M		Issue No.	2583 (cont)
LM End	0.31	Issue Type +	En	Location *	LS



WS view: concrete blocks headwall and pump on river bank. Pump has been removed (marked). Surface erosion around headwall.

#### Photo 2 of 2: UCIP\_FA\_2016\_28183\_51844.jpg



LS view: pressure breaker (bottom) in steel pipe riser and concrete distribution box on levee toe.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	0.32	Rating **	М	Issue No.		135
LM End	0.32	Issue Type +	Ма	Location *		LS
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Animal Co	ontrol		38.7632	67°	38.763267°
item				-121.6790	50°	-121.679050°
DWR ID DWR_RD1500_01_f _ 2016_135						
		Comn	nent Cod	de		
	dents visib or grout bur	le, but rodent rows.	burrows	visible; ne	ed to	backfill and
		Inspecto	or Comm	nent		



Rodent activity on LS slope. Fall 2016.

LM Start	0.49	Rating **	М	Issue No.		134	
LM End	0.49	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude		e/Longitude	
Calegory				Start		End	
Animal Control			38.7644	97°	38.764497°		
Item				-121.6818	67°	-121.681867°	
DWR ID DWR_RD1500_01_f _ 2016_134						·	
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



Rodent burrows on LS slope. Fall 2016.

LM Start	0.56	Rating **	A/W	Issue No.		72		
LM End	0.82	Issue Type +	Issue Type + Ma Location *			WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		38.7644	62°	38.764638°		
itom				-121.683167 °		-121.687690 °		
DWR ID	DWR_RD1	500_01_s _ 201	2_72					
		Comn	nent Cod	de				
V8 : Enviro	onmental F	Requirements.						
Inspector Comment								



View of the revegetation site on the waterward side toe of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	0.56	Rating **	A/W	Issue No.		72 (cont)		
LM End	0.82	Issue Type +	Ma	Location *		WS		
LIVILIIU	Earthen L		ivia		atitud	le/Longitude		
Category	Laitheir	evee			atiitud			
				Start		End		
Item	Vegetatio	า		38.7644	62°	38.764638°		
пеш				-121.6831	83167° -121.6870			
DWR ID DWR_RD1500_01_s _ 2012_72								
		Comn	nent Cod	de				
V8 : Enviro	nmental F	Requirements.						
		Inspecto	or Comm	nent				



Sign is located at the toe of the levee on the waterward side. Spring 2016.

LM Start	0.77	Rating **	С	Issue No.		130	
LM End	0.77	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory					End		
Item	Slope Stability			38.764286 °		38.764286°	
item				-121.686873 °		-121.686873 °	
DWR ID DWR_RD1500_01_s _ 2016_130							
		Comp	nont Coc	10			

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Some depression can be seen on the levee through the vegetation and seems that it may have been caused by a vehicle.

No Photos

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	1.29	Rating **	М	Issue No.	2561			
LM End	1.29	Issue Type +	En	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UCI	DWR UCIP Field Study			7°	38.769697	0	
пеш				-121.691024°		-121.691024°		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:28903 DS\_ID:20094 EP\_NO: 10080

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed from concrete pad and kept inside pump house (may be for storage purpose) on waterside. A 8-inch steel

pipe inside 14-inch pipe.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee, 5.2 feet below crown. Pump on river bank. Butterfly valve on waterward side. Concrete stairway on waterward slope. 1-3/4-inch galvanized iron waterline with tap exposed on landward slope 3.4 feet below crown. 4 foot by 5.1 foot concrete distribution box at landward toe. 1-1/4-inch conduit through levee, 2.0 feet below crown. (ABO No. 10080 - Yturralde)

FS Date: 1/9/2014

LM Start	1.29	Rating **	М	Issue No.	2561 (cont)
LM End	1.29	Issue Type +	En	Location *	WS

# Photo 1 of 2 : UCIP\_FA\_2016\_28903\_53162.jpg

WS view: pipe (left), pump house/store, and concrete steps.

Photo 2 of 2: UCIP\_FA\_2016\_28903\_53161.jpg



WS view: U type headwall and 8-inch pipe sleeved into 14-inch steel pipe. Pump was removed from the pipe.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	1.29	Rating **	М	Issue No.		2562	
LM End	1.29	Issue Type +	En	Location *		WS	
Category Supplemental			GPS La	titud	le/Longitude		
			Start		End		
Item	DWR UC	P Field Study		38.76969	98°	38.769698°	
пеш				-121.691023°		-121.691023°	
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:28905 DS\_ID:20095 EP\_NO: 10080

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: - an electrical conduit for the pump- 1-3/4-inch galvanized iron waterline with tap exposed on landward slope 3.4 feet

below crown not found.Included in Record No. 20094.

FIELD\_STRUCT\_DESC: 2 of 2: 14-inch steel irrigation pipe through levee, 5.2 feet below crown. Pump in CM pump house on waterward slope. Butterfly valve on waterward side. Concrete stairway on waterward slope. A 4 foot by 5 foot concrete distribution box at landside toe. A 1-1/4-inch conduit through levee, 2.0 feet below crown. (ABO No.

10080 - Yturralde) FS Date: 1/9/2014

Photo 1 of 1 : FA_2016_RD1500_189_4_20160913_00004.jpg
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No Photos



View of the retaining wall that is in USACE as-builts on the landward side of the levee looking upstream. Wall cuts into levee toe. Spring 2016.

LM Start	1.33	Rating **	М	Issue No.		4		
LM End	1.33	Issue Type +	En	Location *	LS			
Category	Catagoni Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		38.7700	23°	38.770023°		
item				-121.6905	75°	-121.690575 °		
DWR ID	DWR ID DWR_RD1500_01_s _ 2012_4							
		Comn	nent Cod	le				
V6 : Lands	caping							
			-					
		Inspecto	or Comm	ent				
Retaining	wall built in	to the levee.						

Location N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	1.34	Rating **	A/W	Issue No.		6	
LM End	1.95	Issue Type +	Ma	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
Item		2015 USACE Erosion Survey,			90°	38.777282°	
item	DRAFT			-121.690553 °		-121.685841 °	
DWR ID DWR_RD1500_01_s _ 2016_6							
Comment Code							

#### Inspector Comment

2006 - New erosion upstream, new bank failures near levee but still fairly wide berm in most places. 2008 - Large berm, questionable as to if it should remain in the inventory. 2010 - Minor new erosion, old cobble starting to fail. 2011 - Cobble continues to unravel and additional slumping. 2012 - Minor new erosion at bank mid point. 2013 - Minor new erosion. 2015: No observed changes. [2015 Site ID: SAC\_86-3\_L]



USACE 2013 Photo #1

LM Start	1.63	Rating **	М	Issue No.		2584		
LM End	1.63	Issue Type +	En	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	P Field Study		38.7728	62°	38.772862 °		
пеш				-121.6864	53°	-121.686453 °		
DWR ID								

# Comment Code

#### Inspector Comment

FS\_ID:28204 DS\_ID:20033 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- erosion around pump station.-

overhead electrical line.

FIELD\_STRUCT\_DESC: 10-inch diameter steel irrigation pipeline through levee, 10.0 feet below crown. Pump and gate valve on bank. Service pole and switch panel on waterward shoulder. Pipe crosses irrigation ditch and discharges into steel distribution box on the field. FS Date: 1/9/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28204\_51875.jpg



WS view: Service pole with control panel on levee shoulder.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	1.63	Rating **	М	Issue No.	2584 (cont)		
LM End	1.63	Issue Type +	En	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category					End	
Item	DWR UCI	P Field Study		38.77286	2 °	38.772862°	
пеш				-121.68645	3°	-121.686453 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28204 DS\_ID:20033 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- erosion around pump station.-

overhead electrical line.

FIELD\_STRUCT\_DESC: 10-inch diameter steel irrigation pipeline through levee, 10.0 feet below crown. Pump and gate valve on bank. Service pole and switch panel on waterward shoulder. Pipe crosses irrigation ditch and discharges into steel distribution box on the field.

FS Date: 1/9/2014



WS view: pump (removed) and inlet pipe on river bank.

LM Start	1.96	Rating **	М	Issue No.		2585
LM End	1.96	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.7774	33°	38.777433°
item				-121.6853	48 °	-121.685348°
DWR ID						•

# Comment Code

#### Inspector Comment

FS\_ID:28263 DS\_ID:20034 EP\_NO: 16146

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- overhead powerline- pile structure abandoned- levee slope erosion due to leaky siphon breaker on landside.

FIELD\_STRUCT\_DESC: 12-inch diameter steel pipe through levee, 12.0 feet below crown. Pump mounted on river bank, butterfly valve on waterward side. Power pole with one anchor on waterside slope. Pump discharges into 5 foot by 5 foot concrete distribution box (damaged) across the irrigation ditch on the landside. (Cat. I Furlan) (App. No. 16146) O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014



Photo 1 of 2: UCIP\_FA\_2016\_28263\_51965.jpg

WS view: Pump (removed and plywood plated), pipe, and gate valve in CMP riser on river bank.

## Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	1.96	Rating **	М	Issue No.	2585 (cont)		
LM End	1.96	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory	Category					End	
Item	DWR UCIP Field Study			38.77743	3°	38.777433°	
пеш				-121.68534	8 °	-121.685348°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28263 DS\_ID:20034 EP\_NO: 16146

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- overhead powerline- pile structure abandoned- levee slope erosion due to leaky siphon breaker

on landside.

FIELD\_STRUCT\_DESC: 12-inch diameter steel pipe through levee, 12.0 feet below crown. Pump mounted on river bank, butterfly valve on waterward side. Power pole with one anchor on waterside slope. Pump discharges into 5 foot by 5 foot concrete distribution box (damaged) across the irrigation ditch on the landside. (Cat. I Furlan) (App. No. 16146) O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014



LS view: siphon breaker in CMP riser. Levee slope erosion due to leaky siphon breaker.

LM Start	2.30	Rating **	A/W	Issue No.		2
LM End	2.52	Issue Type +	Ma	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Category			Start		End	
Item		CE Erosion S	Survey,	38.7819	62°	38.784936°
Item	DRAFT			-121.6880	33 °	-121.690033 °
DWR ID	DWR_RD1	500_01_s _ 201	6_2			

# Inspector Comment

Comment Code

2010 - The upstream end of the repair site at 87.0. Repair did not extend far enough upstream. 2011 - New erosion pockets. 2012 -Minor new erosion at toe. 2013 - Minor new erosion. 2015: Significant new toe erosion. [2015 Site ID: SAC\_87-1\_L]

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_2\_20160913\_00002.jpg



USACE 2013 Photo #1

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	2.38	Rating **	М	Issue No.		2586	
LM End	2.38	Issue Type +	En	Location *		WS	
Supplemental			GPS Latitude/Longitude				
Category			Start		End		
Item	. DWR UCIP Field Study			38.78318	34 °	38.783184	0
пеш	rem			-121.68813	36°	-121.688136	0
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28264 DS\_ID:20035 EP\_NO: 10029

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- outlet plugged- looks

abandoned. Found abandoned pipe parts on levee slope and berm.-

overhead powerline

FIELD\_STRUCT\_DESC: Abandoned 12-inch steel irrigation pipe through levee, 11.0-feet below crown. Two metal cutoff walls installed. Pump on bank during irrigation season. Gate valve at waterward toe. Discharges into 2.5x2.5 foot concrete distribution box on landward side of irrigation ditch. (ABO No. 10029 - Anderson). O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014

LM Start	2.38	Rating **	М	Issue No.	2586 (cont)
LM End	2.38	Issue Type +	En	Location *	WS

## Photo 1 of 2: UCIP\_FA\_2016\_28264\_51971.jpg



WS view: steel pipe, gate valve, and pump (removed) on river bank.

Looks abandoned.

#### Photo 2 of 2: UCIP\_FA\_2016\_28264\_51970.jpg



LS view: discharge pipe crossing irrigation ditch on landside.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	2.54	Rating **	М	Issue No.		963
LM End	3.68	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS La	atitud	e/Longitude	
				Start		End
Item	Encroachments			38.7853	51 °	38.797128°
пеш				-121.689075 °		-121.691047°
DWR ID DWR_RD1500_01_s _ 2012_963						
		Comn	nent Cod	de		
DT : Ditch						
		Inspecto	or Comm	nent		

Photo 1 of 1: FA\_2016\_RD1500\_189\_963\_20160913\_00082.jpg



View of the ditch at the toe of the landward side of the levee looking upstream. Spring 2016.

LM Start	3.08	Rating **	С	Issue No.		139	
LM End	3.08	Issue Type +	En	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
				Start		End	
Item	Encroachments			38.7910	78°	38.791078°	
item	item				-121.685563 ° -121.685563		
DWR ID	DWR_RD1	500_01_s _ 201	6_139				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			

No Photos

LM Start	3.60	Rating **	М	Issue No.		132	
LM End	3.68	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Odlogory			Start		End		
ltem Vegetation			38.7964	33°	38.797116°		
			-121.689810 °		-121.691008°		
DWR ID	DWR_RD1	500_01_f _ 201	6_132				
		Comn	nent Cod	de			
V1 : Contre easements		grass and wee	ds on th	e levee slo	pes a	and	
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	3.60	Rating **	М	Issue No.		133			
LM End	3.68	Issue Type +	Ma	Location *		WS			
Catagory	Earthen L	evee		GPS La	atitud	e/Longitude			
Category			Start		End				
Item	Vegetatio	n		38.7964	34°	38.797117°			
пеш				-121.689810 °		-121.691004°			
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_133								
		Comn	nent Cod	de					
V1 : Control annual grass and weeds on the levee slopes and easements.									
Inspector Comment									

No Photos

LM Start	3.69	Rating **	M	Issue No.		131			
LM End	3.69	Issue Type +	En	Location *		WS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Encroach		38.7971	52°	38.797152	0			
пеш				-121.691238°		-121.691238	0		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_131								
		Comn	nent Coo	de					
BU : Buildi	ng								
		Inspecto	or Comm	nent					
Abandone	Abandoned building								
1									



Abandoned building at waterward toe of the levee. Fall 2016.

LM Start	3.93	Rating **	М	Issue No.		7			
LM End	3.93	Issue Type +	En	Location *		LS			
0.1	Earthen L	evee		GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Encroachments					38.797516°			
пеш				-121.6956	45°	-121.695645°			
DWR ID DWR_RD1500_01_s _ 2012_7									
		Comn	nent Cod	de					
BU : Buildi	ng								
	Inspector Comment								



A small building is encroaching into the landside levee toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

3.93	Rating **	M	Issue No.		7 (cont)			
3.93	Issue Type +	En	Location *		LS			
Earthen L	evee		GPS La	atitud	e/Longitude			
			Start		End			
Encroachi	ments		38.7975	16°	38.797516°			
		-121.695645 °		-121.695645 °				
DWR ID DWR_RD1500_01_s _ 2012_7								
	Comn	nent Coc	de					
ng								
Inspector Comment								
	3.93 Earthen L Encroachr DWR_RD1:	3.93 Issue Type + Earthen Levee Encroachments  DWR_RD1500_01_s _ 201 Comm	3.93 Issue Type + En  Earthen Levee  Encroachments  DWR_RD1500_01_s _ 2012_7  Comment Cooning	3.93 Issue Type + En Location *  Earthen Levee GPS La  Start  Encroachments 38.7975  -121.6956  DWR_RD1500_01_s _ 2012_7  Comment Code  ng	3.93   Issue Type +   En   Location *    Earthen Levee   GPS Latitud   Start   Encroachments   38.797516   -121.695645    DWR_RD1500_01_s _ 2012_7   Comment Code			



Chicken coupes have been added along the toe of the levee. Spring

LM Start	3.97	Rating **	A/W	Issue No.		8	
LM End	3.97	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory	ategory					End	
ltom	Vegetatio	n		38.797838°		38.797838°	
пеш	Item S			-121.696046°		-121.696046°	
DWR ID DWR_RD1500_01_s _ 2012_8							
Comment Code							

# V6 : Landscaping

#### Inspector Comment

Most of the vegetation has been removed. There appears to be new landscaping at the toe of the levee.

LM Start	3.97	Rating **	A/W	Issue No.	8 (cont)
LM End	3.97	Issue Type +	En	Location *	LS

# Photo 1 of 2 : FA\_2016\_RD1500\_189\_8\_20160913\_00009.jpg



The landscape is planted into the encroachment zone within 15' of the toe.

#### Photo 2 of 2: FA\_2016\_RD1500\_189\_8\_20160913\_00010.jpg



View of the landscaping on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	3.97	Rating **	M	Issue No.		129			
LM End	4.18	Issue Type +	Ma	Location *		WS			
Category Earthen Levee				GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Vegetatio	n		38.7978	58°	38.800844°			
пеш				-121.696065 ° -121.696					
DWR ID DWR_RD1500_01_f _ 2016_129									
		Comn	nent Coc	le					
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	oes :	and			
easements	S.								
		Inspecto	or Comm	ent					

No Photos

LM Start	3.97	Rating **	М	Issue No.		128		
LM End	4.64	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee GPS Latitude/L					le/Longitude		
Odlogory				Start		End		
Item	Vegetatio	n	38.79785	8°	38.803332 °			
пеш				-121.69606	55°	-121.703524°		
DWR ID	DWR_RD1	500_01_f _ 201	6_128					
		Comn	nent Coc	le				
V1 : Control annual grass and weeds on the levee slopes and easements.								
	Inspector Comment							

No Photos

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

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# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	4.01	Rating **	М	Issue No.	2587		
LM End	4.01	Issue Type +	En	Location *	LS		
Category	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		38.79843	36°	38.798436	0
пеш				-121.69628	30°	-121.696280	0
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:28272 DS\_ID:20037 EP\_NO: 3638

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - No protection for pressure breaker.
FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through levee, 2.4 feet below crown. Slant pump on berm. Pressure breaker on landward slope. Service pole at landward toe. Discharges into 36-inch diameter concrete standpipe on landside. (App. No. 3638 - J. Waters)

FS Date: 1/9/2014

LM Start	4.01	Rating **	М	Issue No.	2587 (cont)
LM End	4.01	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28272\_52012.jpg



WS view: slant pump on steel frame on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28272\_52011.jpg



LS view: pressure breaker without protection on levee slope.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	4.02	Rating **	М	Issue No.		54		
LM End	4.12	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		38.7985	26°	38.800063°		
item		-121.696326 ° -121.696622						
DWR ID DWR_RD1500_01_s _ 2012_54								
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				
Ditch runs	along the	toe of the leve	ee.					

# Photo 1 of 1 : FA\_2016\_RD1500\_189\_54\_20160913\_00040.jpg



View of the ditch on the landward side of the levee looking upstream.

Spring 2016.

LM Start	4.16	Rating **	М	Issue No.		11	
LM End	4.16	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS La	atitude	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.8005	48°	38.800548°	
пеш				-121.696751 ° -1		-121.696751 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_11				
		Comn	nent Cod	de			
BU : Buildi	ing						
			0				
		Inspecto	or Comm	nent			

# Photo 1 of 1 : FA\_2016\_RD1500\_189\_11\_20160913\_00012.jpg



View of the equipment shed on the landward side of the levee looking downstream. Spring 2016.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	4.61	Rating **	М	Issue No.		142	
LM End	4.61	Issue Type +	En	Location *		LS	
Category	evee	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	Encroachi	ments		38.8035	09°	38.803509°	
item	-121.703046° -121.703046						
DWR ID DWR_RD1500_01_s _ 2016_142							
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			



View of the pruning pile on the landward side of the levee looking upstream. Spring 2016.

LM Start	4.68	Rating **	М	Issue No.		2566		
LM End	4.68	Issue Type +	En	Location *		LS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCI	P Field Study		38.8030	25°	38.803025°		
item			-121.7040	91 °	-121.704091 °			
DWR ID								

# Comment Code

#### Inspector Comment

FS\_ID:28912 DS\_ID:20040 EP\_NO: 5031

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: New butterfly valve in CMP riser on waterside slope. New pipe and pump. Needs cleaning and clearing of siphon breaker in CMP on landside. An abandoned 5x5 foot concrete distribution box on landside. Abandoned pipe found on both sides of the levee. FIELD\_STRUCT\_DESC: 12-inch diameter steel irrigation pipe through levee at slight angle, 4.2 feet below crown. A 2-inch diameter conduit through levee, 2.0 feet below crown. Slant pump on steel platform on berm. (App. No. 5031-Knox.) Discharges into irrigation ditch and an abandoned 5x5 foot concrete distribution box on landside. Pipe originally installed in 1950 under App. No.1466 By Estate of Caroline L. Knox reinstalled by USCE, in 1958; O&M Manual Sac 128, March 1960. FS Date: 1/9/2014

# Photo 1 of 2: UCIP\_FA\_2016\_28912\_53181.jpg



WS view: slant pump and switch panel in shed on levee berm.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	4.68	Rating **	М	Issue No.	2	2566 (cont)
LM End	4.68	Issue Type +	Issue Type + En		LS	
Category	ental	GPS La	titud	e/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.80302	25 °	38.803025 °
item				-121.70409	91 °	-121.704091 °
DWR ID						

# Comment Code

## Inspector Comment

FS\_ID:28912 DS\_ID:20040 EP\_NO: 5031

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: New butterfly valve in CMP riser on waterside slope. New pipe and pump.Needs cleaning and clearing of siphon breaker in CMP on landside.An abandoned 5x5 foot concrete distribution box on landside. Abandoned pipe found on both sides of the levee.

FIELD\_STRUCT\_DEŚC: 12-inch diameter steel irrigation pipe through levee at slight angle, 4.2 feet below crown. A 2-inch diameter conduit through levee, 2.0 feet below crown. Slant pump on steel platform on berm. (App. No. 5031-Knox.) Discharges into irrigation ditch and an abandoned 5x5 foot concrete distribution box on landside. Pipe originally installed in 1950 under App. No.1466 By Estate of Caroline L. Knox reinstalled by USCE, in 1958; O&M Manual Sac 128, March 1960. FS Date: 1/9/2014



LS view: obstructed siphon breaker in CMP riser.

LM Start	5.00	Rating **	С	Issue No.		143	
LM End	5.14	Issue Type +	En	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory	Category					End	
Item	Vegetatio	n		38.801559°		38.802006 °	
пеш				-121.7095	74°	-121.712192°	
DWR ID DWR_RD1500_01_s _ 2016_143							
Comment Code							
VC - Landananian							

V6 : Landscaping

Inspector Comment

Farmer's crops are at the toe of the levee.

No Photos

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	5.14	Rating **	М	Issue No.		108	
LM End	5.14	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory						End	
Item	Encroachi	ments		38.8019	62°	38.801962°	
пеш				-121.712118°		-121.712118°	
DWR ID	DWR_RD1	500_01_f _ 201	5_108				
		Comn	nent Cod	de			
EQ : Equip	ment						
		Inspecto	or Comm	nent			

Photo 1 of 1: FA\_2016\_RD1500\_189\_108\_20160913\_00055.jpg



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

LM Start	5.17	Rating **	С	Issue No.		1340		
LM End	5.17	Issue Type +	Ма	Location *		LS		
Category	evee	GPS Latitude/Longitude						
Odlogory	egory					End		
Item	Vegetatio	n		38.8021	64°	38.802164°		
itom				-121.7125	60°	-121.712560 °		
DWR ID DWR_RD1500_01_s _ 2014_1340								
Comment Code								
V7 · Trees	V7 · Trees / Woody Vegetation							

: Trees / Woody Vegetation

Inspector Comment

Monitor tree that may pose a future threat to the integrity of the levee.

No Photos

LM Start	5.18	Rating **	М	Issue No.		124		
LM End	5.35	Issue Type +	Ma	Location *		WS		
Category	evee	GPS La	atitud	e/Longitude				
Category				Start		End		
Item	Vegetatio	า		38.8022	65°	38.803346°		
пеш				-121.712787°		37° -121.715626°		
DWR ID DWR_RD1500_01_f _ 2016_124								
		Comn	nent Cod	de				
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	pes a	and		
easements	S.							
		Inspecto	or Comm	nent				

Photo 1 of 1: FA\_2016\_RD1500\_189\_124\_20160926\_00268.jpg



View of vegetation on WS slope. Fall 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	5.19	Rating **	М	Issue No.		2567	
LM End	5.19	Issue Type +	En	Location *		WS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.8023	22°	38.802322	0
пеш				-121.7129	08°	-121.712908	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:28913 DS\_ID:20041 EP\_NO: 10056 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Depression on landside levee slope around siphon breaker due to leakage. Siphon breaker needs protection.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through levee, 4.0 feet below crown. 1 1/2-inch conduit through levee, 20 ft below crown. Slant pump in CM pump house on waterside. Wooden steps on waterside slope. Siphon breaker on landside slope. A 5 ft x 5 ft Concrete distribution box at landward toe. (ABO No. 10056 - Leiser) O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014

LM Start	5.19	Rating **	М	Issue No.	2567 (cont)
LM End	5.19	Issue Type +	En	Location *	WS



WS view: wooden steps to pump house on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28913\_53183.jpg



LS view: depression on landside levee slope around siphon breaker due to leakage. Concrete distribution box (top) on levee toe.

# **Levee Inspection Report By Mile - Fall 2016**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	5.27	Rating **	М	Issue No.		127		
LM End	5.32	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.8028	62°	38.803182°		
пеш				-121.7141	78°	-121.715141°		
DWR ID	DWR_RD1	500_01_f _ 201	6_127					
		Comn	nent Coo	le				
V1 : Contro easements		grass and wee	eds on th	e levee slo	pes	and		
		Inspecto	or Comm	ent				

No Photos

LM Start	5.32	Rating **	М	Issue No.	125			
LM End	5.35	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio	38.8031	81°	38.803344	0			
пеш				-121.7151	41 °	-121.715616	0	
DWR ID	DWR_RD1	500_01_f _ 201	6_125					
		Comn	nent Cod	de				
V6 : Lands	scaping							
	Inspector Comment							





View of vegetation on LS slope. Fall 2016.

LM Start	5.61	Rating **	М	Issue No.		52
LM End	5.69	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroachi	ments		38.8030	67°	38.803238 °
item				-121.7202	?70°	-121.721847°
DWR ID	DWR_RD1	500_01_s _ 201	2_52			
		Comn	nent Cod	de		
BU : Buildi	ng					
Inspector Comment						
Sting Rayz	Sting Rayz Beach Boardwalk Marina on the waterside berm.					



View of Sting Rayzs RV Park on the berm of the waterward side of the levee looking downstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	5.61	Rating **	М	Issue No.		52 (cont)	
LM End	5.69	Issue Type +	En	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.8030	67°	38.803238 °	
пеш			-121.720270° -121.721				
DWR ID	DWR ID DWR_RD1500_01_s _ 2012_52						
		Comn	nent Cod	de			
BU : Buildi	ng						
		Inspecto	or Comm	nent			
Sting Rayz Beach Boardwalk Marina on the waterside berm.							

# Photo 2 of 2: FA\_2016\_RD1500\_189\_52\_20160913\_00039.jpg



View of Sting Rayzs RV Park on the berm of the waterward side of the levee looking upstream. Spring 2016.

LM Start	6.08	Rating **	М	Issue No.		123	
LM End	6.08	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.8087	'36 °	38.808736°	
item				-121.722800 °		° -121.722800°	
DWR ID	DWR_RD1	500_01_f _ 201	6_123				
		Comn	nent Cod	de			
DE : Debri	S						
		Inspecto	or Comm	nent			

Photo 1 of 1: FA\_2016\_RD1500\_189\_123\_20160926\_00267.jpg



View of WS slope. Fall 2016.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	6.48	Rating **	М	Issue No.		2588		
LM End	6.48	Issue Type + En		Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCIP Field Study			38.81450	1 °	38.814501	0	
пеш				-121.72304	0°	-121.723040	0	
DWR ID								

# Inspector Comment

Comment Code

FS\_ID:28286 DS\_ID:20044 EP\_NO: 10074

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- 36-inch concrete standpipe on landside.

2-inch conduit through the levee.Pipe description does not match with field observaion. It needs review and more info from LMA.A capped pipe, air vent, and butterfly valve found on landside toe. But, it is not clear whether these belongs to this crossing.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe and electric conduit through levee, 13.0 feet below crown. Slide gate in 42-inch Corrugated metal riser on berm. Slant pump on steel pump platform on berm. Installed by USCE, 1959. (ABO No. 10074 - TI&T Co.) O&M Manual Sac 128. March 1960.

FS Date: 1/9/2014

LM Start	6.48	Rating **	М	Issue No.	2588 (cont)
LM End	6.48	Issue Type +	En	Location *	WS

# Photo 1 of 2 : UCIP\_FA\_2016\_28286\_52059.jpg



WS view: CMP riser with slide gate and slant pump on steel platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28286\_52058.jpg



LS view: a capped pipe on levee toe. It is not clear whether this pipe is connected to the CMP riser on waterside.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	7.15	Rating **	М	Issue No.		217	
LM End	7.15	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		38.8241	19°	38.824119°	
пеш				-121.722776° -121.72277			
DWR ID DWR_RD1500_01_s _ 2012_217							
		Comn	nent Cod	le			
T1 : Trim t	rees to at I	east five feet	above g	round level.			
			_				
		Inspecto	or Comm	ent			



View of the trees on the landward side of the levee looking upstream. Spring 2016.

LM Start	7.15	Rating **	М	Issue No.		2568	
LM End	7.15	Issue Type +	Type + En Lo			LS	
Category				GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCIP Field Study			38.8242	08°	38.824208°	
item				-121.7227	93 °	-121.722793 °	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:28923 DS\_ID:20047 EP\_NO: 10048

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: An abandoned pipe. Highly deteriorated pipe on river bank. Needs proper abandonment. Not found- Siphon breaker at

landward levee toe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch diameter irrigation pipe through levee, 4.5 feet below crown. A 1-inch conduit through levee, 4.5 feet below crown. A pump in metal shed on bank. Gate valve on waterside end. Service pole and 24-inch Concrete standpipe at landside toe. Installed by USCE, 1958 (ABO. No. 10048-King) O&M Manual Sac 128, March 1960.

FS Date: 1/9/2014

# Photo 1 of 2 : UCIP\_FA\_2016\_28923\_53202.jpg



WS view: dilapidated and abandoned CM pump house on berm. Pipe and gate valve also on berm.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	7.15	Rating **	М	Issue No.	2	2568 (cont)	
LM End	7.15	Issue Type +	En	Location *		LS	
Category	GPS Lati	tud	e/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.824208	3°	38.824208	0
пеш				-121.722793	3°	-121.722793	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:28923 DS\_ID:20047 EP\_NO: 10048

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: An abandoned pipe. Highly deteriorated pipe on river bank. Needs proper abandonment. Not found-Siphon breaker at

landward levee toe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch diameter irrigation pipe through levee, 4.5 feet below crown. A 1-inch conduit through levee, 4.5 feet below crown. A pump in metal shed on bank. Gate valve on waterside end. Service pole and 24-inch Concrete standpipe at landside toe. Installed by USCE, 1958 (ABO. No. 10048-King) O&M Manual Sac 128, March 1960. FS Date: 1/9/2014



WS view: deteorated and abandoned steel pipe on river bank.

LM Start	7.20	Rating **	A/W	Issue No.		1343				
LM End	7.20	Issue Type +	Ma	Location *		LS				
Category	evee	GPS La	titud	e/Longitude						
Calegory	Category					End				
Item	Vegetatio	n		38.82490	00°	38.824900°				
item				-121.7228	51 °	-121.722851 °				
DWR ID	DWR_RD1	500_01_s _ 201								
Comment Code										

V7: Trees / Woody Vegetation

Inspector Comment

# Photo 1 of 1: FA\_2016\_RD1500\_189\_1343\_20160913\_00088.jpg



Monitor tree that may pose a future threat to the integrity of the levee. Spring 2014

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	7.49	Rating **	М	Issue No.		16		
LM End	7.49	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		38.8289	44 °	38.828944°		
пеш				-121.7243	29°	-121.724329°		
DWR ID DWR_RD1500_01_s _ 2012_16								
		Comn	nent Cod	de				
EQ : Equip	ment							
		Inspecto	or Comm	nent				

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_16\_20160913\_00015.jpg



View of the equipment along the levee toe on the landward side of the levee looking upstream. Spring 2016.

LM Start	7.72	Rating **	М	Issue No.		2598
LM End	7.72	Issue Type +	En	Location *		LS
Category	ental	GPS La	atitud	le/Longitude		
Category	Category					End
Item	DWR UCI	P Field Study	,	38.8316	38°	38.831638°
пеш			-121.7265	80°	-121.726580°	
DWR ID						·

#### Comment Code

#### Inspector Comment

FS\_ID:50199 DS\_ID:20049 EP\_NO: 8147

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: New pumps installed at LS toe ditch, could not find permit for this work. No signs of leakage or excessive vegetation growth in alignment with the pipe. Riser silted in; recommend installing a lid. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/10/2014:Not found- slide gate in 48-inch corrugated metal riser at waterside toe.Repair works under way. Contact LMA for repair works information.Sign of leaky pipe and siphon breaker. This needs detailed investigation. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through the levee, 4.8 feet below the crown. Slant pump mounted on steel structure at the edge of the berm. A 4 by 4-foot concrete distribution box at the landside (LS) toe with newly installed pumps with shut-off valves. (Permit No. 8147, 1972 - Driver). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128 (HLM 7.79)].

# Photo 1 of 2 : UCIP\_FA\_2016\_50199\_53204.jpg



WS view: slant pump on steel platform on end of berm.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	7.72 Rating ** M			Issue No.	2598 (cont)		
LM End	7.72	Issue Type +	En	Location *		LS	
Category Supplemental				GPS La	titud	le/Longitude	
				Start		End	
Item	DWR UCI	P Field Study		38.83163	38°	38.831638	
пеш				-121.72658	30°	-121.726580	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:50199 DS\_ID:20049 EP\_NO: 8147

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: New pumps installed at LS toe ditch, could not find permit for this work. No signs of leakage or excessive vegetation growth in alignment with the pipe. Riser silted in; recommend installing a lid. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/10/2014:Not found- slide gate in 48-inch corrugated metal riser at waterside toe.Repair works under way. Contact LMA for repair works information.Sign of leaky pipe and siphon breaker. This needs detailed investigation. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through the levee, 4.8 feet below the crown. Slant pump mounted on steel structure at the edge of the berm. A 4 by 4-foot concrete distribution box at the landside (LS) toe with newly installed pumps with shut-off valves. (Permit No. 8147, 1972 - Driver). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128 (HLM 7.79)].

FS Date: 8/29/2016



WS view: sign of leakage- excessive vegetation on levee slope.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	7.96	Rating **	М	Issue No.	2554		
LM End	7.96	Issue Type +	En	Location *	LS		
Catagony	ental	GPS La	atitud	le/Longitude			
Calegory	Category					End	
Item	DWR UC	P Field Study		38.8342	60°	38.834260 °	
пеш				-121.7295	66 °	-121.729566°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28323 DS\_ID:20051 EP\_NO: 13882

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Power pole on landside. 2-inch conduit through the levee. Service box on waterside. Concrete pad on waterside. Not found- Concrete distribution box on landward side; not found- gate valve on waterside.Need proper abandonment.Pipe visible on river bank, waterside levee slope and landside field.

FIELD\_STRUCT\_DESC: Abandoned 6-inch diameter steel irrigation pipe and electric conduit through levee, 4.9 feet below crown. 1-1/2 conduit through levee, 4.0 feet below crown. Service pole at landward levee toe. (ABO. No. 10062-Moroni, App. No. 13882)

FS Date: 1/10/2014

LM Start	7.96	Rating **	М	Issue No.	2554 (cont)
LM End	7.96	Issue Type +	En	Location *	LS



WS view: CMP with air vent (right), concrete pad (left), and switch panel (left) on levee slope.

#### Photo 2 of 2: UCIP\_FA\_2016\_28323\_52124.jpg



WS view: abandoned steel pipe exposed on river bank.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.29	Rating **	М	Issue No.		150		
LM End	8.29	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS L	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		38.8388	802°	38.838802 °		
iteiii				-121.7295	98°	-121.729598°		
DWR ID DWR_RD1500_01_s _ 2016_150								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.		
		Inspecto	or Comm	nent				
Erosion caused by vehicles and runoffs from rain.								

LM Start	8.29	Rating **	М	Issue No.	150 (cont)
LM End	8.29	Issue Type +	Ma	Location *	WS

# Photo 1 of 2 : FA\_2016\_RD1500\_189\_150\_20160926\_00266.jpg

Updated view of the erosion site on waterward side of the levee. Fall 2016.

### Photo 2 of 2: FA\_2016\_RD1500\_189\_150\_20160913\_00071.jpg



View of the erosion on the waterward side of the levee looking upstream. Spring 2016.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.33	Rating **	М	Issue No.		3		
LM End	8.47	Issue Type +	Ma	Location *	WS			
Supplemental				GPS La	atitud	le/Longitude		
Calegory	Category					End		
Item	2015 USACE Erosion Survey,				46 °	38.840347°		
item	DRAFT			-121.7295	91 °	-121.726857°		
DWR ID	DWR_RD1	500_01_s _ 201	6_3					
Comment Code								

#### Inspector Comment

1997 - Damage to cobble revetment on top left bank and toe damage. 2004 - Site is pretty minor. 2010 - Cobbles continue to deteriorate. 2011 - Minor new erosion at the toe. 2013 - Might be able to shorten due to deposition. 2015: Site shortened, downstream end has plenty of berm and deposited material, well vegetated. [2015 Site ID: SAC\_92-8\_L]



USACE 2013 Photo #1

LM Start	8.35	Rating **	М	Issue No.		2555		
LM End	8.35	Issue Type +	En	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Category				Start		End		
Item	DWR UCI	P Field Study		38.8394	46°	38.839446 °		
пеш				-121.7289	01 °	-121.728901 °		
DWR ID								

#### Comment Code

#### Inspector Comment

FS\_ID:28324 DS\_ID:20053 EP\_NO: 10064

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned as service pole not found.May

need proper abandonement.

FIELD\_STRUCT\_DESC: 2 foot by 2 foot concrete box culvert through levee, 13.0 feet below crown. Pump on 6 foot diameter concrete pump well on berm. Slide gate in 42-inch CM riser on waterward slope. 4.5 foot by 6 foot concrete distribution box at landward toe. (ABO No.

10064 - Nix) FS Date: 1/10/2014



WS view: slide gate in CMP riser on levee slope. Looks abandoned.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.35	8.35 Rating ** M		Issue No.	2	2555 (cont)		
LM End	8.35	Issue Type + En		Location *		WS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P Field Study		38.83944	6°	38.839446	۰	
пеш				-121.72890	1 °	-121.728901	0	
DWR ID								

Comment Code

## Inspector Comment

FS\_ID:28324 DS\_ID:20053 EP\_NO: 10064

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned as service pole not found.May

need proper abandonement.

FIELD\_STRUCT\_DESC: 2 foot by 2 foot concrete box culvert through levee, 13.0 feet below crown. Pump on 6 foot diameter concrete pump well on berm. Slide gate in 42-inch CM riser on waterward slope. 4.5 foot by 6 foot concrete distribution box at landward toe. (ABO No.

10064 - Nix) FS Date: 1/10/2014



WS view: vertical pump on concrete sump on levee berm. Looks abandoned.

LM Start	8.67	Rating **	М	Issue No.		2556	
LM End	8.67	Issue Type +	En	Location *	WS		
Category	ental	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP Field Study		38.8422	18°	38.842218°	
пеш		-121.725728°		° -121.725728°			
DWR ID							
טויאינט							

#### Comment Code

#### Inspector Comment

FS\_ID:28343 DS\_ID:20054 EP\_NO: 5518

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- siphon breaker on landward shoulder.

Pump removed.

FIELD\_STRUCT\_DESC: 10-inch diameter steel irrigation pipe through levee, 2.5 feet below crown. Pump on concrete platform. 1-inch conduit installed in joint trench. Service pole at landward levee toe. Discharges into 4x4 foot concrete distribution box on landward side. Installed in 1966 under application No. 5518 by I.E. Bundock-M.Bundock, River Mile 92.9.

FS Date: 1/10/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28343\_52145.jpg



WS view: U type concrete headwall, pipe, and pump on river bank.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.67	М	Issue No.	2556 (cont)			
LM End	8.67	Issue Type +	En	Location *	WS		
Category	ental	GPS La	titud	e/Longitude			
Calegory			Start		End		
Item	DWR UC	P Field Study		38.8422	18°	38.842218 °	
пеш				-121.7257	28 °	-121.725728°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28343 DS\_ID:20054 EP\_NO: 5518

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- siphon breaker on landward shoulder.

Pump removed.

FIELD\_STRUCT\_DESC: 10-inch diameter steel irrigation pipe through levee, 2.5 feet below crown. Pump on concrete platform. 1-inch conduit installed in joint trench. Service pole at landward levee toe. Discharges into 4x4 foot concrete distribution box on landward side. Installed in 1966 under application No. 5518 by I.E. Bundock-M.Bundock, River Mile 92.9.

FS Date: 1/10/2014



WS view: pipe, pump (removed and capped with plywood), and gate valve on river bank.

Photo 1 of 1: FA\_2016\_RD1500\_189\_18\_20160913\_00016.jpg

LM Start	8.72	Rating **	М	Issue No.	18			
LM End	8.72	Issue Type +	En	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachments			38.8426	73°	38.842673°		
			-121.7264	42°	-121.726442 °			
DWR ID	DWR_RD1500_01_s _ 2012_18							
Comment Code								
BU : Building								

Inspector Comment

-4	L.	Allan.	班	
-	1		-	
			77	
		No.		
				(A) (B)
				Indiana in

The corner of the building has encroached into the toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.79	Rating **	М	Issue No.		109		
LM End	8.79	Issue Type +	En	Location *	LS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Encroachi	ments	38.8434	81 °	38.843481 °			
пеш		-121.727256 ° -121.72725						
DWR ID DWR_RD1500_01_f _ 2015_109								
Comment Code								
DE : Debri	S							
		Inspecto	or Comm	nent				
Abandoned pipe is embedded into levee slope.								



View of the abandoned pipe on the landward side of the levee looking upstream. Fall 2015.

LM Start	8.92	Rating **	A/W	Issue No.		1344				
LM End	8.92	Issue Type +	Ma	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Calegory				Start		End				
Item	Vegetatio	n		38.8450	76°	38.845076°				
пеш	-121.728301 ° -121.728301									
DWR ID DWR_RD1500_01_s _ 2014_1344										
	Comment Code									
V7 : Trees	/ Woody \	/egetation								
		Inspecto	or Comm	nent						



The walnut tree at the toe has fallen. The roots are exposed and the branches are holding it up. Spring 2014

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.92	Rating **	A/W	Issue No.	1344 (cont)				
LM End	8.92	Issue Type +	Ma	Location *	LS				
Category	Earthen L	evee	GPS La	atitud	le/Longitude				
Calegory				Start		End			
Vegetation 38.845076 ° 38.845076 °									
item	-121.728301 ° -121.728301 °								
DWR ID DWR_RD1500_01_s _ 2014_1344									
Comment Code									
V7 : Trees	/ Woody \	egetation/							
			0						
		Inspecto	or Comm	nent					

				1	
	A	7	Air	1	
1					10
	1		Market Control		
					that -
				10/2	1/2015

Photo 2 of 3: FA\_2016\_RD1500\_189\_1344\_20160913\_00090.jpg

The walnut tree has been trimmed but still remains at the landward toe of the levee. Fall 2015.

### LM Start 8.92 Rating \*\* A/W Issue No. 1344 (cont) LM End 8.92 Issue Type + Ma Location \* LS

Photo 3 of 3: FA\_2016\_RD1500\_189\_1344\_20160913\_00091.jpg



Perspective view of the walnut tree on the landward side of the levee looking downstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	8.95	Rating **	М	Issue No.	2557			
LM End	8.95	Issue Type +	En	Location *	LS			
Category	GPS La	tituc	le/Longitude					
Calegory	Category					End		
Item	DWR UCI	P Field Study		38.84557	'8	38.845578 °		
пеш				-121.72840	6°	-121.728406 °		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:28363 DS\_ID:20055 EP\_NO: 8503

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. No pump found on WS.New well near landside. May need proper abandonement. Exposed pipe on waterside. Found steel plate closed pipe on landside.

FIELD\_STRUCT\_DESC: Abandoned 12-inch steel irrigation pipe through levee, 3.8 feet below crown. Pump on concrete pad with headwall. Siphon breaker in 24-inch CM riser on waterward slope. 1-1/4-inch conduit through levee, 3.0 feet below crown. Service pole with switch panel at landward toe. Concrete distribution box on landward toe. (App. No. 8503 - Munson) O&M Manual Sac 128, March 1960.

FS Date: 1/10/2014

LM Start	8.95	Rating **	М	Issue No.	2557 (cont)
LM End	8.95	Issue Type +	En	Location *	LS

## Photo 1 of 2 : UCIP\_FA\_2016\_28363\_52167.jpg

WS view: siphon breaker in CMP riser on levee slope.

#### Photo 2 of 2: UCIP\_FA\_2016\_28363\_52166.jpg



WS view: inlet steel pipe with gate valve on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	9.13	Rating **	М	Issue No.		2558		
LM End	9.13	Issue Type +	En	Location *		LS		
Category	ental	GPS Latitude/Longitude						
Calegory	Category					End		
Item	DWR UC	P Field Study		38.8478	41 °	38.847841 °		
пеш				-121.7271	72°	-121.727172°		
DWR ID	DWR ID							
	Comment Code							

#### Inspector Comment

FS\_ID:28364 DS\_ID:20056 EP\_NO: 5598

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- Wood headwall 18 ft from landward toe.

Not found- Flap gate on landward side.No outlet structure found. Only a capped pipe found, but not sure whether it is connected to the crossing.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through levee, 4.8 feet below crown. Electrical conduit through levee, 4.8 feet below crown. Slant pump on steel structure. Siphon breaker in landward shoulder. Service pole on landside toe. Discharges into field. Installed 1967. (App. No. 5598 & 8505 - James)

FS Date: 1/10/2014

LM Start	9.13	Rating **	М	Issue No.	2558 (cont)
LM End	9.13	Issue Type +	En	Location *	LS



WS view: slant pump on steel platform on levee berm. Excessive oil leak from the pump.

#### Photo 2 of 2: UCIP\_FA\_2016\_28364\_52175.jpg



LS view: air vent in steel pipe riser on levee slope.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	9.40	Rating **	A/W	Issue No.		74
LM End	9.57	Issue Type +	Ма	Location *	WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
ltem Vegetation			38.8502	67°	38.852564°	
			-121.723275°		-121.723179°	
DWR ID DWR_RD1500_01_s _ 2012_74						
		Comn	nent Cod	de		
V8 : Enviro	onmental F	Requirements.				
		Inspecto	or Comm	nent		

LM Start	9.40	Rating **	A/W	Issue No.	74 (cont)
LM End	9.57	Issue Type +	Ma	Location *	WS

## Photo 1 of 2 : FA\_2016\_RD1500\_189\_74\_20160913\_00046.jpg



View of the revegetation site along the edge of the berm on the waterward side of the levee looking downstream. Spring 2016.

#### Photo 2 of 2: FA\_2016\_RD1500\_189\_74\_20160913\_00047.jpg



Sign for the revegetation site by USACE.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	9.66	Rating **	М	Issue No.		2570	
LM End	9.66	Issue Type +	En	Location *		WS	
Catagory	Category					e/Longitude	
Category				Start		End	
Item	DWR UCIP Field Study			38.85336	64°	38.853364°	
пеш				-121.72461	17°	-121.724617°	
DWR ID						·	
	Comment Code						

#### Inspector Comment

FS\_ID:28365 DS\_ID:20057 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. Pump has been removed. No outlet pipe found. Not found- Wooden service panel and 3x5 foot concrete distribution box at landward shoulder. May need proper abandonment.

FIELD\_STRUCT\_DESC: 14-inch diameter steel irrigation pipe through levee, 4.2 feet below crown. Pump and gate valve on concrete pump platform on bank. Siphon breaker on waterward shoulder. Service panel and pole on waterside shoulder. O&M Manual Sac 128, March 1960. FS Date: 1/10/2014

LM Start	9.66	Rating **	М	Issue No.	2570 (cont)	
LM End	9.66	Issue Type +	En	Location *	WS	



WS view: CMP riser with siphon breaker on levee slope.

Photo 2 of 2: UCIP\_FA\_2016\_28365\_52180.jpg



WS view: siphon breaker obstructed by dumped-trash in CMP riser.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	10.12	Rating **	М	Issue No.	2591		
LM End	10.12	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Lat	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.85785	3°	38.857853°	
пеш				-121.72822	22°	-121.728222°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:50069 DS\_ID:20058 EP\_NO: 10068

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 01/10/2014Surface erosion along pipe alighment on landside.30-inch concrete pipe in CMP riser on waterside. 30-inch x 24-inch concrete culvert on landside.

FIELD\_STRUCT\_DESC: 2-foot by 2.5-foot concrete box irrigation culvert diagonally through the levee, 13 feet below the crown. A pump on the river bank, power pole and switch panel on the waterside (WS) berm. Concrete surge box with slide gate on the WS berm. Concrete distribution box at the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit 10068, 1960 - Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 10.22)].

FS Date: 1/10/2014

LM Start	10.12	Rating **	M	Issue No.	2591 (cont)
LM End	10.12	Issue Type +	En	Location *	WS



WS view: pipe and pump with appurtenances on river bank. Pump removed and plugged with plywood.

#### Photo 2 of 2: UCIP\_FA\_2016\_50069\_52189.jpg



LS view: surface erosion along pipe alighment on landside.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	10.60	Rating **	С	Issue No.		156		
LM End	10.60	Issue Type +	En	Location *	WS			
Category	Earthen L	GPS L	atitud	e/Longitude				
Calegory	.gory					End		
Item	Encroachi	Encroachments			86°	38.861186°		
item			-121.735207 °		-121.735207	0		
DWR ID	DWR_RD1	500_01_s _ 201	6_156					
		Comn	nent Cod	de				
BU : Buildi	ng							
	Inspector Comment							

No Photos

LM Start	10.70	Rating **	М	Issue No.		2569	
LM End	10.70	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltom	DWR UCIP Field Study			38.8615	50°	38.861550	0
Item				-121.7370	06 °	-121.737006	0
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28925 DS\_ID:20059 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed. Obstructed siphon breaker in CMP riser on landside.

FIELD\_STRUCT\_DESC: A 12-inch diameter steel irrigation pipe through levee, 4.3 feet below crown. A 1-1/2 conduit through levee. 2.0 feet below crown. Pump on river bank, siphon breaker on landside shoulder. A 8x6 ft. concrete distribution box and service pole at landside toe. O&M Manual Sac 128, March 1960.

FS Date: 1/10/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28925\_53210.jpg



WS view: pipe, pump (removed and plugged with plywood), headwall, and appurtenances on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	10.70	Rating **	М	Issue No.	- :	2569 (cont)	
LM End	10.70	Issue Type +	En	Location *	WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	category			Start		End	
Item	DWR UCI	P Field Study		38.86155	o°	38.861550	0
item				-121.73700	3°	-121.737006	0
DWR ID							
		Comm	nent Coc	le			

#### Inspector Comment

FS\_ID:28925 DS\_ID:20059 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed. Obstructed siphon breaker in CMP

riser on landside.

FIELD\_STRUCT\_DESC: A 12-inch diameter steel irrigation pipe through levee, 4.3 feet below crown. A 1-1/2 conduit through levee. 2.0 feet below crown. Pump on river bank, siphon breaker on landside shoulder. A 8x6 ft. concrete distribution box and service pole at landside toe. O&M Manual Sac 128, March 1960.

FS Date: 1/10/2014

#### Photo 2 of 2: UCIP\_FA\_2016\_28925\_53209.jpg



LS view: siphon breaker in CMP riser (bottom) on levee slope and concrete distribution box (top) on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.24	Rating **	U	Issue No.		2592	
LM End	11.24	Issue Type +	En	Location *		WS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		38.8656	49°	38.865649°	
пеш				-121.7452	79 °	-121.745279°	
DWR ID	/R ID						
	Comment Code						

#### Inspector Comment

FS\_ID:50043 DS\_ID:20060 EP\_NO: 10068 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Pot hole in alignment with pipe is still present on levee crown. Sloughing of LS slope is in alignment with pipe. Permit underway for installation of new pipe so urgent category will soon be corrected. Siemens service pole may be unauthorized. Otherwise same as last inspection.01/10/2014 Pump removed.10-inch pipe joined to 14-inch pipe.Wet, some vegetations, and subsidence along pipe alignment on landside. This needs detailed investigation.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through the levee, 4.7 feet below the crown. Pump and gate valve on concrete platform on the waterside (WS) bank. Switch control house and new Siemens service pole with meter on the waterside (WS) shoulder. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS. (Automatic Board Order (ABO) issued as Permit No. 10068, 1974 - Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 11.35)]. FS Date: 8/29/2016

LM Start	11.24	Rating **	U	Issue No.	2592 (cont)
LM End	11.24	Issue Type +	En	Location *	WS



WS view: pipe, pump (removed and plugged with plywood plate), and appurtenances on river bank.

#### Photo 2 of 2: UCIP\_FA\_2016\_50043\_52212.jpg



LS view: wet, some vegetations, and subsidence along pipe alignment on landside.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Maintenance Deficiancy
M: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

\*\* Rating
A: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.30	Rating **	М	Issue No.		20	
LM End	11.30	Issue Type +	En	Location *	LS		
Catagonia Earthen Levee				GPS La	atitud	le/Longitude	
Category			Start		End		
Item	Vegetation					38.866383°	
item				-121.745911°		-121.745911 °	
DWR ID DWR_RD1500_01_s _ 2012_20							
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comn	nent			



View of the landscaping on the landward side of the levee looking upstream. Fall 2015.

LM Start	11.45	Rating **	М	Issue No.	2597		
LM End	11.45	Issue Type +	En	Location *		LS	
Category	Suppleme	GPS Latitude/Longitud					
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.8685	44 °	38.868544°	
item				-121.7464	71 °	-121.746471 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:50198 DS\_ID:20061 EP\_NO: 10041

Repair Type: Non-Urgent Crossing Status: Found

Crossing Status: Found
UCIP Comments: 08/29/2016 Depressions cited previously are a makeshift staircase and not an indication of a problem with pipe. Pipe
partiallay exposed on LS slope which should be backfilled. Crossing has
been downgraded from Urgent to Non-Urgent. (K. Fazel UCIP)01/10/2014 Depressions on both sides of the levee slope. It
needs more investigation.Pump removed. (P. Amatya - DWR)
FIELD\_STRUCT\_DESC: 8-inch steel irrigation pipe through the levee, 4
feet below the crown. Pump and gate valve on concrete pump platform
on bank. Corrugated metal switch house on waterside (WS). Service
pole on WS shoulder. 8-foot by 6-foot (inside dimensions) concrete
distribution box on the landside (LS). Pole at the LS toe. (Automatic
Board Order (ABO) issued as Permit No. 10041, 1974 - Duffy)
[Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento
O&M Manual 128, March 1960 (HLM 11.57)].
FS Date: 8/29/2016

#### Photo 1 of 2: UCIP\_FA\_2016\_50198\_52220.jpg



WS view: pipe, pump (removed), headwall, and appurtenances on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.45	Rating **	М	Issue No.	2597 (cont)		
LM End	11.45	Issue Type +	En	Location *	LS		
Category	Suppleme	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR UCI	P Field Study		38.86854	4°	38.868544	0
пеш				-121.74647	1 °	-121.746471	0
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:50198 DS\_ID:20061 EP\_NO: 10041

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Depressions cited previously are a makeshift staircase and not an indication of a problem with pipe. Pipe partiallay exposed on LS slope which should be backfilled. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/10/2014 Depressions on both sides of the levee slope. It needs more investigation.Pump removed. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 8-inch steel irrigation pipe through the levee, 4 feet below the crown. Pump and gate valve on concrete pump platform on bank. Corrugated metal switch house on waterside (WS). Service pole on WS shoulder. 8-foot by 6-foot (inside dimensions) concrete distribution box on the landside (LS). Pole at the LS toe. (Automatic Board Order (ABO) issued as Permit No. 10041, 1974 - Duffy) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 11.57)].



LS view: depressions along the pipe alighment on levee slope. It needs detailed investigation.

LM Start	11.45	Rating **	М	Issue No.		114	
LM End	11.45	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroach	ments		38.8685	77°	38.868577 °	
itein				-121.7464	87°	-121.746487 °	
DWR ID DWR_RD1500_01_f _ 2015_114							
	Comment Code						

ST : Stairway

FS Date: 8/29/2016

#### Inspector Comment

There is erosion at the toe of the levee where the concrete box is located.

#### Photo 1 of 3: FA\_2016\_RD1500\_189\_114\_20160913\_00058.jpg



Perspective view of the concrete box on the landward side of the levee looking upstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.45	Rating **	М	Issue No.		114 (cont)	
LM End	11.45	Issue Type +	En	Location *		LS	
Cotogony	Earthen L	evee		GPS La	titud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		38.86857	77°	38.868577°	
пеш				-121.74648	37°	-121.746487°	
DWR ID DWR_RD1500_01_f _ 2015_114							
		Comn	nent Cod	de			
ST : Stairv	vay						
		l	0				
		Inspecto	or Comm	ient			
There is ellocated.	rosion at th	e toe of the le	evee whe	ere the cond	rete	box is	

LM Start	11.45	Rating **	М	Issue No.	114 (cont)
LM End	11.45	Issue Type +	En	Location *	LS

# Photo 2 of 3 : FA\_2016\_RD1500\_189\_114\_20160913\_00059.jpg

There is erosion at the levee toe around the concrete box. There are also stairs leading down the slope. Fall 2015.

Photo 3 of 3: FA\_2016\_RD1500\_189\_114\_20160913\_00060.jpg



There is slight erosion on the waterward side of the levee where the pipe seems to run through the levee. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.80	Rating **	A/W	Issue No.		19	
LM End	11.98	Issue Type +	Ma	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category					End	
Item		CE Erosion S	Survey,	38.8718	53 °	38.870581	0
item	DRAFT			-121.7493	30°	-121.752059	0
DWR ID DWR_RD1500_01_s _ 2016_19							
Comment Code							

#### Inspector Comment

1997 - No toe on the large upstream rubble (mix of broken concrete, bricks, rock, and steal) - should be replaced. Oversized bank. 2001 New slump at the downstream end. 2003 - Some minor bank retreat at the downstream end. 2004 - Some new retreat at the downstream end. 2006 - Some new erosion, mainly on the steep slope and scarps. (Pumping station is not part of the erosion site.) 2010 - Minor new erosion. 2011 - Minor new erosion at the toe. 2015: Fresh slumping. [2015 Site ID: SAC\_95-8\_L]

Photo 1 of 1 : FA_2016_RD1500_189_1_20160913_00001.j	pg

No Photos



USACE 2013 Photo #1

LM Start	11.99	Rating **	A/W	Issue No.		1
LM End	12.26	Issue Type +	Ma	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	2015 USACE Erosion Survey,			38.8704	74°	38.869139°
пеш	DRAFT			-121.7522	37°	-121.757108°
DWR ID DWR_RD1500_01_s _ 2016_1						

#### Comment Code

#### Inspector Comment

2000 - Vertical Modesto Formation bank with mass failure. 2003 -Upstream end has some new bank retreat. 2004 - Upstream end is worse. 2006 - Some new erosion, mainly on the steep slope and scarps. (Pumping station is not part of the erosion site.) 2010 - Some new erosion and deposition at upstream end, definite encroachments. 2011 - Minor new erosion at the toe. 2015: Site removed, sufficient berm width. [2015 Site ID: SAC\_96-2\_L]

N/A: Not Applicable LS: Land Side WS: Water Side CR : Crown

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	11.99	Rating **	М	Issue No.		116
LM End	11.99	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Odlogory				Start		End
Item	Encroach	ments		38.8708	40°	38.870840 °
item				-121.7525	94°	-121.752594°
DWR ID	DWR_RD1	500_01_f _ 201	5_116			
		Comn	nent Cod	le		
GA : Garb	age					
		Inspecto	or Comm	ent		



View of the debris on the waterward side of the levee. Fall 2015.

LM Start	12.00	Rating **	М	Issue No.		2590	
LM End	12.00	Issue Type +	En	Location *	WS		
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		38.8707	80°	38.870780°	
ILEIII	item			-121.7526	30°	-121.752630°	
DWR ID						·	
Comment Code							

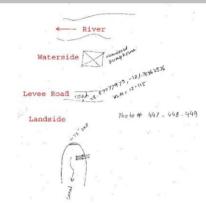
## Inspector Comment

FS\_ID:41744 DS\_ID:20008 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: An abondoned pump house on waterside and a 72-inch corrugated metal pipe on landside. The pipe discharges into irrigation ditch (canal). Water was flowing during the field visit. Needs to verify from LMA whether this pipe is through the levee or not. FIELD\_STRUCT\_DESC: 1 of 2: Two 4 foot and 3.5 foot concrete culverts through levee, 17 feet below the crown, pump on WS. FS Date: 1/10/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_41744\_51343.jpg



Sketch of Utility Crossing @HLM 12.115

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	12.00	Rating **	М	Issue No.	2	2590 (cont)
LM End	12.00	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.8707	80°	38.870780°
пеш				-121.7526	30°	-121.752630°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:41744 DS\_ID:20008 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: An abondoned pump house on waterside and a 72-inch corrugated metal pipe on landside. The pipe discharges into irrigation ditch (canal). Water was flowing during the field visit. Needs to verify from LMA whether this pipe is through the levee or not. FIELD\_STRUCT\_DESC: 1 of 2: Two 4 foot and 3.5 foot concrete culverts through levee, 17 feet below the crown, pump on WS. FS Date: 1/10/2014

#### Photo 2 of 2: UCIP\_FA\_2016\_41744\_51345.jpg



WS view: abandoned concrete pump house. No pump and pipe found.

LM Start	12.42	Rating **	М	Issue No.		24	
LM End	12.53	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category	Category			Start		End	
Item	Encroach	ments		38.8688	34°	38.867492°	
пеш				-121.7600	14°	-121.760903 °	
DWR ID DWR_RD1500_01_s _ 2012_24							
Comment Code							

#### EQ: Equipment

#### Inspector Comment

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_24\_20160913\_00020.jpg



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	12.55	Rating **	М	Issue No.		2596			
LM End	12.55	Issue Type +	En	Location *		LS			
Category				GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	DWR UC	P Field Study		38.8672	54°	38.867254°			
пеш				-121.7612	12°	-121.761212°			
DWR ID									
	Comment Code								

#### Inspector Comment

FS\_ID:50197 DS\_ID:20063 EP\_NO: 10061

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Same as last inspection. (K. FAzel - UCIP)01/10/2014 Needs proper abandonement. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate in 4-foot by 4-foot concrete box at the waterside (WS) toe. Concrete box at the landside (LS) toe. Pipe crosses overflow area to the river. (Automatic Board Order (ABO) issued as Permit No. 10061, 1974 - Matteoli). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 12.69)].

FS Date: 8/29/2016

LM Start	12.55	Rating **	М	Issue No.	2596 (cont)
LM End	12.55	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_50197\_52425.jpg



WS view: slide gate (left) in concrete box at levee toe. Slide gate and the box mostly burried.

#### Photo 2 of 2: UCIP\_FA\_2016\_50197\_52424.jpg



LS view: concrete intake box on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	12.57	Rating **	М	Issue No.		118		
LM End	12.57	Issue Type +	Ма	Location *		WS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Erosion / I	Bank Caving		38.8671	08°	38.867108°		
пеш				-121.761498°		-121.761498°		
DWR ID DWR_RD1500_01_f _ 2015_118								
		Comn	nent Cod	le				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.		
		1	0	1				
		Inspecto	or Comm	ient				



View of the erosion on the waterward side of the levee looking upstream. Fall 2015.

-								
LM Start	12.81	Rating **	М	Issue No.		25		
LM End	12.81	Issue Type +	En	Location *	CR			
Category Earthen Levee				GPS La	atitud	e/Longitude		
				Start		End		
Item	Encroachments				27°	38.865127°		
item		-121.765157°		-121.765157°				
DWR ID	DWR_RD1	500_01_s _ 201	2_25					
		Comn	nent Cod	de				
EQ : Equip	ment							
Inspector Comment								



View of the equipment on the crown of the levee looking upstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	13.01	Rating **	М	Issue No.		26		
LM End	13.01	Issue Type +	En	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Encroachi	ments	38.8634	38°	38.863438 °			
пеш				-121.768212 °		-121.768212°		
DWR ID DWR_RD1500_01_s _ 2012_26								
		Comn	nent Cod	de				
BU : Buildi	ng							
		Inspecto	or Comm	nent				

Photo 1 of 1: FA\_2016\_RD1500\_189\_26\_20160913\_00022.jpg



The building's backside was built into the toe of the levee.

LM Start	13.05	Rating **	М	Issue No.		992			
LM End	13.05	Issue Type +	En	Location *	LS				
Category Earthen Levee				GPS Latitude/Longitude					
				Start		End			
ltom	Encroach	ments		38.8630	31 °	38.863081 °			
ltem				-121.7687	31 °	-121.768781 °			
DWR ID DWR_RD1500_01_s _ 2012_992									
	Comment Code								

#### EQ: Equipment

#### Inspector Comment

There are equipment and tires at this location.

## Photo 1 of 1: FA\_2016\_RD1500\_189\_992\_20160913\_00086.jpg



Next to the building there are tires and axles stored at the toe.

LM Start	13.78	Rating **	М	Issue No.		119		
LM End	13.78	Issue Type +	En	Location *		CR		
Category Earthen Levee			GPS La	atitud	le/Longitude			
Category				Start		End		
Item	Encroach	ments		38.8597	'15 °	38.859715°		
item				-121.7808	817°	-121.780817°		
DWR ID DWR_RD1500_01_f _ 2015_119								
		Comn	nent Cod	de				
EQ : Equip	ment							
Inspector Comment								



View of the equipment on the crown of the levee looking upstream. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	13.96	Rating **	M	Issue No.		28
LM End	13.96	Issue Type +	En	Location *		CR
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachi	ments		38.8576	25°	38.857625°
пеш				-121.7828	32°	-121.782832 °
DWR ID	DWR_RD1	500_01_s _ 201	2_28			
		Comn	nent Cod	de		
EQ : Equip	ment					
Inspector Comment						
Equipment are on the crown of the levee but does not obstruct access.						



View of the equipment on the crown side of the levee looking upstream. Fall 2015.

LM Start	13.98	Rating **	М	Issue No.		10
LM End	14.26	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Odlogory				Start		End
Item		CE Erosion S	Survey,	38.8572	239°	38.861899°
itein	DRAFT			-121.783771 °		-121.784057°
DWR ID	DWR_RD1	500_01_s _ 201	6_10			·
		Comn	nent Cod	de		
		Inspecto	or Comm	nent		

1997 - Intermittent toe failure of the hand placed riprap; failure of toe materials. 2015: No observed changes. [2015 Site ID: SAC\_99-0\_L]



USACE 2013 Photo #1

LM Start	14.17	Rating **	М	Issue No.	122		
LM End	14.17	Issue Type +	Ма	Location *	LS		
Category	evee	GPS La	titud	e/Longitude			
Category	Start					End	
Item	Vegetatio	n		38.8603	68°	38.860368 °	
пеш				-121.7832	68°	-121.783268 °	
DWR ID DWR_RD1500_01_f _ 2016_122							
Comment Code							

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment



Vegetation on LS of the levee. Fall 2016.

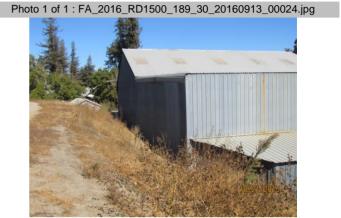
* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	14.21	Rating **	М	Issue No.		30
LM End	14.21	Issue Type +	En	Location *		LS
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	ments		38.8608	848°	38.860848 °
пеш				-121.7833	807°	-121.783307°
DWR ID	DWR_RD1	500_01_s _ 201	12_30			
		Comn	nent Cod	de		
BU : Build	ing					
		Inspect	or Comm	nent		
Concrete stemwall into levee embankement.						



View of the building on the landward side of the levee looking upstream. Fall 2015.

LM Start	14.22	Rating **	М	Issue No.		138	
LM End	14.22	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.8611	72 °	38.861172°	
item				-121.783524°		° -121.783524°	
DWR ID	DWR_RD1	500_01_f _ 201	6_138				
		Comn	nent Cod	de			
BU : Build	ing						
		Inspecto	or Comm	nent			



View of a building encroaching levee on landside toe. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	14.24	Rating **	M	Issue No.		31
LM End	14.24	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.8613	35°	38.861335°
пеш				-121.7836	05°	-121.783605 °
DWR ID DWR_RD1500_01_s _ 2012_31						
		Comn	nent Cod	de		
V6 : Lands	scaping					
		Inspect	or Comm	nent		



View of the landscaping on the landward side of the levee looking upstream. Spring 2016.

LM Start	14.24	Rating **	М	Issue No.		115
LM End	14.24	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory	Start End					
Item	Animal Co	ontrol		38.861353°		38.861353°
пеш				-121.7836	10°	-121.783610 °
DWR ID DWR_RD1500_01_s _ 2016_115						
Comment Code						

A1 : Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Ground squirrel ran across the top of the levee to the landward side of the levee into the landscaping.

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_115\_20160926\_00263.jpg



View of rodent burrows on LS slope of the levee. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

11100	44.07	Rating **	U	Issue No.		77
LM Start	14.27					77
LM End	14.27	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Odicgory				Start		End
Item	Trim / Thi	n Trees		38.8617	'93 °	38.861793°
пеш				-121.7837	'03	-121.783703 °
DWR ID DWR_RD1500_01_s _ 2012_77						
		Comn	nent Cod	de		
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	and	d room to
		Inspecto	or Comm	nent		

03/09/2016
View of the trees on the landward side of the levee looking upstream.
Spring 2016.

LM Start	14.27	Rating **	U	Issue No.	77 (cont)
LM End	14.27	Issue Type +	Ма	Location *	LS



Photo 1 of 2: FA\_2016\_RD1500\_189\_77\_20160913\_00048.jpg

Trees block visibility on the landward slope . Spring 2016.

LM Start	14.71	Rating **	М	Issue No.		969	
LM End	15.76	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS La	atitud	le/Longitude		
Odlogory			Start		End		
Item	Encroachments				95°	38.871827°	
item				-121.789402 °		-121.804158 °	
DWR ID DWR_RD1500_01_s _ 2012_969							
		Comn	nent Cod	de			
DT : Ditch							
Inspector Comment							
Ditch is at the levee toe.							



View of the ditch on the landward side of the levee looking upstream. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	15.11	Rating **	М	Issue No.		2571	
LM End	15.11	Issue Type +	En	Location *	LS		
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCIP Field Study			38.8668	41 °	38.866841 °	
пеш				-121.7940	47 °	-121.794047°	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:28486 DS\_ID:20010 EP\_NO: 10037

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Water treatment plant on landside. Working during field visit. Not found- Flap Gate in 6.5 foot by 7.0 foot O.D. concrete distribution box at landward toe.

FIELD\_STRUCT\_DESC: 22-inch concrete encased steel irrigation pipe through levee, 17.5 feet below crown. 1.5 -inch conduit through levee, 6.0 feet below crown. Slant pump on river bank. Gate valve in CMP riser on waterside. A 6.5 foot by 7.0 foot O.D. concrete distribution box at landward toe. (ABO. No. 10037 - Clauss) O&M Manual Sac 128, March 1960.

FS Date: 1/10/2014

LM Start	15.11	Rating **	М	Issue No.	2571 (cont)
LM End	15.11	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28486\_52461.jpg



WS view: CMP riser with gate valve and slant pump on steel platform.

#### Photo 2 of 2: UCIP FA 2016 28486 52460.jpg



WS view: oil leaking slant pump on steel platform.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	15.12	Rating **	М	Issue No.		21	
LM End	15.12	Issue Type +	En	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Encroachments				38.8668	78°	38.866878 °	
пеш	Item				10°	-121.794110°	
DWR ID DWR_RD1500_01_s _ 2012_21							
		Comn	nent Cod	de			
DE : Debris							
		Inspecto	or Comm	nent			
A pile of rip rap and concrete needs to be removed.							

LM Start	15.12	Rating **	М	Issue No.	21 (cont)
LM End	15.12	Issue Type +	En	Location *	WS



Updated view of debris site on WS slope. Fall 2016.

Photo 2 of 2: FA\_2016\_RD1500\_189\_21\_20160913\_00018.jpg



View of the concrete debris on the waterward side of the levee. Fall 2015.

LM Start	15.27	Rating **	С	Issue No.		110		
LM End	15.27	Issue Type +	En	Location *		WS		
Category	Earthen Levee					e/Longitude		
Calegory			Start		End			
ltem Encroachments				38.8682	44°	38.868244°		
item	item				20°	-121.796220°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2014_110							
		Comn	nent Cod	de				
DE : Debri	s							
		Inspecto	or Comm	nent				

No Photos

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	15.34	Rating **	С	Issue No.		159	
LM End	17.29	Issue Type +	Ma	Location *		CR	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		rface / Depres	ssions /	38.8687	48°	38.887612°	
пеш	Rutting			-121.7973	71 °	-121.807911 °	
DWR ID	DWR_RD1	500_01_s _ 201	6_159				
		Comn	nent Cod	de			
C3: Add a	ppropriate	gravel or roa	d base.	Grade and	com	pact.	
	Inspector Comment						

No Photos

LM Start	15.43	Rating **	М	Issue No.		120
LM End	15.43	Issue Type +	Ma	Location *		WS
Earthen Levee				GPS Latitude/Longitude		
Calegory	Category					End
Item	Animal Co	ontrol		38.8694	66 °	38.869466 °
item				-121.7989	52°	-121.798952°
DWR ID DWR_RD1500_01_f _ 2016_120						
		Comn	nent Coo	le		

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_120\_20160926\_00261.jpg



View of rodent burrow on waterward side of the levee. Fall 2016.

LNA Ctart	15.76	Rating **	М	Issue No.		32	
LM Start	15.76	realing	IVI	issue ivo.		32	
LM End	15.76	Issue Type +	En	Location *		WS	
Catagonia Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Encroachments			38.871828°		38.871828°	
пеш				-121.8041	58°	-121.804158 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_32				
Comment Code							
EQ : Equipment							

Inspector Comment



View of the equipment on the waterward side of the levee looking upstream. Fall 2015.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	16.30	Rating **	М	Issue No.		33	
LM End	16.30	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.8757	'85	38.875785°	
пеш				-121.812330 °		-121.812330°	
DWR ID DWR_RD1500_01_s _ 2012_33							
		Comn	nent Cod	de			
V6 : Lands	caping						
Inspector Comment							



View of the shrubs on the landward side of the levee looking upstream. Spring 2016.

LM Start	16.97	Rating **	М	Issue No.		2572
LM End	16.97	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		38.8850	98°	38.885098°
пеш				-121.8128	84°	-121.812884°
DWR ID						

#### Comment Code

FS\_ID:28489 DS\_ID:20081 EP\_NO: 8510

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe not visible on river bank. Cleaning and clearing

require around slide gates. May be abandoned.

FIELD\_STRUCT\_DESC: 24-inch CM irrigation pipe through levee, 15.0 feet below crown. Slide gate in 36-inch CM riser on waterward slope. Slide gate on concrete "U" headwall an irrigation ditch at landward toe. (App No. 8510, 11/1972 - Clauss) O&M Manual Sac 128, March 1960. FS Date: 1/14/2014

Inspector Comment

Photo 1 of 1: FA\_2016\_RD1500\_189\_33\_20160913\_00027.jpg



WS view: CMP riser with slide gate on levee slope.

WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	16.97	Rating **	М	Issue No. <b>2572 (cont)</b>			
LM End	16.97	Issue Type +	En	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory						End	
Item	DWR UCI	P Field Study		38.88509	98°	38.885098	
item				-121.8128	84 °	-121.812884	
DWR ID	/R ID						
Comment Code							

#### Inspector Comment

FS\_ID:28489 DS\_ID:20081 EP\_NO: 8510

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe not visible on river bank. Cleaning and clearing

require around slide gates. May be abandoned.

FIELD\_STRUCT\_DESC: 24-inch CM irrigation pipe through levee, 15.0 feet below crown. Slide gate in 36-inch CM riser on waterward slope. Slide gate on concrete "U" headwall an irrigation ditch at landward toe. (App No. 8510, 11/1972 - Clauss) O&M Manual Sac 128, March 1960.

FS Date: 1/14/2014



WS view: cleaning and clearing requre around slide gate in CMP riser.

LM Start	17.27	Rating **	М	Issue No.		117
LM End	17.27	Issue Type +	En	Location *		LS
Category	Cotogon Earthen Levee				atitud	le/Longitude
Category				Start		End
Item	Encroachments			38.8873	77°	38.887377°
item			-121.808236 °		-121.808236 °	
DWR ID	DWR_RD1	500_01_f _ 201	6_117			
		Comn	nent Cod	de		
ST : Stairw	<i>ı</i> ay					
Inspector Comment						
Stairway was made by digging levee slope						

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_117\_20160926\_00260.jpg



View of stairs dug on landside levee slope. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	17.27	Rating **	М	Issue No.		2573
LM End	17.27	Issue Type + En Location *		Location *		LS
Category	Suppleme	ental		GPS La	atitude	e/Longitude
Calegory	Calegory					End
Item	DWR UCI	P Field Study		38.8873	77°	38.887377°
пеш				-121.8082	19°	-121.808219°
DWR ID						

#### Inspector Comment

Comment Code

FS\_ID:28490 DS\_ID:20066 EP\_NO: 1739

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Most of the pipe exposed on levee slope.Pipe leakage repaired recently.Siphon breaker requires protection. FIELD\_STRUCT\_DESC: 20-inch welded steel irrigation pipe through levee, 5.5 feet below crown. Slant pump mounted on steel structure on waterside. Siphon breaker on landward slope. Discharges into concrete distribution box at landward toe. (App. No. 1739 - Clauss) (RM 102.50) O&M Manual Sac 128, March 1960

FS Date: 1/14/2014

LM Start	17.27	Rating **	М	Issue No.	2573 (cont)
LM End	17.27	Issue Type +	En	Location *	LS



WS view: slant pump on steel platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28490\_52484.jpg



LS view: siphon breaker (bottom) without protection, exposed pipe on levee slope, and distribution box on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	17.28	Rating **	М	Issue No.		163	
LM End	17.28	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Encroachments ltem				38.8875	07°	38.887507°	
item				-121.808055 °		-121.808055 °	
DWR ID DWR_RD1500_01_s _ 2016_163							
		Comn	nent Cod	le			
DE : Debri	S						
			•				
		Inspecto	or Comm	ient			

## Photo 1 of 1: FA\_2016\_RD1500\_189\_163\_20160913\_00075.jpg



View of the debris at the toe of the levee on the landward side looking upstream. Spring 2016.

LM Start	17.34	Rating **	М	Issue No.		121
LM End	17.34	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments			38.8881	37°	38.888137°
item	item			-121.807273 °		-121.807273°
DWR ID	DWR_RD1	500_01_f _ 201	5_121			
		Comn	nent Cod	de		
PI : Pipe						
		Inspecto	or Comm	nent		
Pipe is causing the erosion on the berm of the levee.						



Perspective view of the pump on the waterward side of the levee looking upstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	17.34	Rating **	М	Issue No.	121 (cont)			
LM End	17.34	Issue Type +	En	Location *	WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachments			38.8881	37°	38.888137°		
item				-121.807273°		-121.807273°		
DWR ID DWR_RD1500_01_f _ 2015_121								
		Comn	nent Cod	de				
PI : Pipe								
Inspector Comment								
Pipe is cau	Pipe is causing the erosion on the berm of the levee.							

hoto 2 of 3 : FA_2016_RD1500_189_121_20	160913_00065.jp
	10/21/2015

There is erosion underneath the pipe on the waterward berm area. Fall 2015.

## LM Start 17.34 Rating \*\* M Issue No. 121 (cont) LM End 17.34 Issue Type + En Location \* WS

Photo 3 of 3: FA\_2016\_RD1500\_189\_121\_20160913\_00066.jpg



The concrete for the base stand has been exposed due to erosion.

LM Start	18.29	Rating **	С	Issue No.		51	
LM End	18.29	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory						End	
Item	Erosion /	Bank Caving		38.9008	73°	38.900873 °	
item				-121.8026	80°	-121.802680 °	
DWR ID DWR_RD1500_01_s _ 2012_51							
		Comn	nent Cod	de			
E1 : Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	18.38	Rating **	М	Issue No.		Issue No.		13
LM End	19.06	Issue Type +	Ma	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item		CE Erosion S	Survey,	38.901337°		38.902721 °		
пеш	DRAFT			-121.801175 °		° -121.790677°		
DWR ID DWR_RD1500_01_s _ 2016_13								
Comment Code								

#### Inspector Comment

1997 - Pocket failures of cobble revetment toe; scallops of rock loss along the bank; irregular bankline developing. 2001 - Small scallops in the toe of the berm. 2005 - Still multiple erosion pockets in the toe. 2006 - Two new small slumps. 2011 - Old cobble continue to fail causing minor slumping. 2012 - Portions of site appears to be stabilizing. 2015: No observed changes. [2015 Site ID: SAC\_104-0\_L]



USACE 2013 Photo #1

LM Start	18.39	Rating **	М	Issue No.		113	
LM End	18.39	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS L	atitud	e/Longitude	
				Start		End	
Item	Encroachments			38.901022°		38.901022°	
item			-121.801150 °		-121.801150°		
DWR ID	DWR_RD1	500_01_f _ 201	6_113				
		Comn	nent Cod	de			
DE : Debri	s						
Inspector Comment							

## Photo 1 of 1 : FA\_2016\_RD1500\_189\_113\_20160926\_00259.jpg



Debris on landside slope of the levee. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	18.40	Rating **	М	Issue No.		2574				
LM End	18.40	Issue Type + En Location *		18.40 Issue Type + En Location *		18.40 Issue Type + En Location *		Location *		LS
Category				GPS Latitude/Longitude						
Category				Start		End				
Item	DWR UCI	IP Field Study		38.90088	5°	38.900885 °				
пеш			-121.80099	)°	-121.800999 °					
DWR ID										

#### Inspector Comment

Comment Code

FS\_ID:28505 DS\_ID:20068 EP\_NO: 2425

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Concrete pad on both sides of the levee

shoulders.Oil leaks from pump set.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee, 3.0 feet below crown. Slant pump in Corrugated metal pump house on steel structure on bank. Meter pole on slope. Siphon breaker on landward shoulder. Discharges into 36-inch concrete standpipe at landward toe. (App. No. 2425 - Hiatt). O&M Manual Sac 128, March 1960.

FS Date: 1/14/2014

LM Start	18.40	Rating **	М	Issue No.	2574 (cont)
LM End	18.40	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28505\_52517.jpg



WS view: slant pump in CM shed on levee berm. Oil leaks from the pump.

#### Photo 2 of 2: UCIP\_FA\_2016\_28505\_52516.jpg



LS view: siphon breaker (bottom) on exposed steel pipe on levee slope and steel stand pipe (top) on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	18.91	Rating **	М	Issue No.		111		
LM End	19.16	Issue Type +	Ma	Location *		WS		
Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio	n		38.9007	'88°	38.904001 °		
item	-121.791939 ° -121.789					-121.789979 °		
DWR ID DWR_RD1500_01_f _ 2016_111								
Comment Code								
V1 : Contreasements		rass and wee	eds on th	e levee slo	pes	and		
		Inspecto	or Comm	nent				

Photo 1 of 1: FA\_2016\_RD1500\_189\_111\_20160926\_00257.jpg



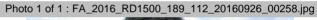
Vegetation on WS slope. Fall 2016.

LM Start	18.91	Rating **	М	Issue No.		112		
LM End	19.16	Issue Type +	Ма	Location *	LS			
Cotogory Earthen Levee			GPS Lati	tud	e/Longitude			
Calegory	Category			Start		End		
Item	Vegetatio	n		38.900788	°	38.904000°		
пеш				-121.791938	°	-121.789979°		
DWR ID DWR_RD1500_01_f _ 2016_112								
	Commont Code							

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

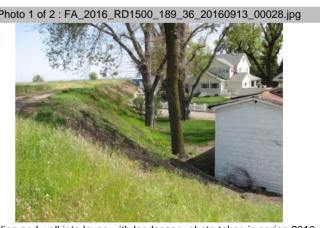
#### Inspector Comment





Vegetation on LS slope. Fall 2016.

LM Start	18.98	Rating **	М	Issue No.		36	
LM End	18.98	Issue Type +	En	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Encroachi	ments		38.9015	70°	38.901570°	
item	-121.791235					-121.791235°	
DWR ID DWR_RD1500_01_s _ 2012_36							
		Comn	nent Cod	de			
BU : Buildi	ng						
Inspector Comment							
Concrete retaining wall toe of landside levee. Permit #10065							



Building and wall into levee with landscape, photo taken in spring 2010.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

3.98	Issue Type +				36 (cont)		
	.cccc rypo r	En	Location *		LS		
hen L	Category Earthen Levee				e/Longitude		
			Start		End		
roachr	ments		38.9015	70°	38.901570°		
	-121.791235° -121.791						
DWR ID DWR_RD1500_01_s _ 2012_36							
	Comn	nent Cod	de				
		_					
	Inspecto	or Comm	nent				
Concrete retaining wall toe of landside levee. Permit #10065							
	R_RD1	Comn	R_RD1500_01_s _ 2012_36  Comment Coc	roachments 38.9015 -121.7912  R_RD1500_01_s _ 2012_36	roachments 38.901570 ° -121.791235 °  R_RD1500_01_s _ 2012_36  Comment Code  Inspector Comment		



View of the building on the landward side of the levee looking upstream. Fall 2015.

LM Start	19.01	Rating **	М	Issue No.		37	
LM End	19.01	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.9019	65°	38.901965°	
item	-121.790993 ° -121.790					-121.790993°	
DWR ID DWR_RD1500_01_s _ 2012_37							
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspecto	or Comm	nent			
Concrete retaining wall along toe of landside levee. Permit #10065							



The groundcover is on the levee slope above the concrete retaining wall.

The groundcover is irrigated.

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#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	19.01	Rating **	М	Issue No.		37 (cont)		
LM End	19.01	Issue Type +	En	Location *		LS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		38.9019	65 °	38.901965 °		
пеш			-121.7909	93 °	-121.790993 °			
DWR ID DWR_RD1500_01_s _ 2012_37								
		Comn	nent Cod	de				
V6 : Lands	caping							
Inspector Comment								
Concrete retaining wall along toe of landside levee. Permit #10065								



View of the groundcover on the landward side of the levee looking upstream. Fall 2015.

LM Start	19.16	Rating **	A/W	Issue No.		5	
LM End	19.47	Issue Type +	Ма	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2015 USACE Erosion Survey, DRAFT			38.9040	41°	38.906697°	
				-121.7902	98°	-121.792796°	
DWR ID	DWR_RD1500_01_s _ 2016_5						
Comment Code							

#### Inspector Comment

1997 - Cobbles eroded off the clay materials; not much evidence of erosion on the toe; cobble loss on the toe. 2011 - Some minor new erosion. 2015: No observed changes. [2015 Site ID: SAC\_104-5\_L]



USACE 2013 Photo #1

LM Start	19.23	Rating **	С	Issue No.		165	
LM End	19.23	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Erosion / Bank Caving			38.9050	)22°	38.905022	0
пеш		-121.7900	)73°	-121.790073	0		
DWR ID DWR_RD1500_01_s _ 2016_165							
		Comn	nent Cod	de			
E1 : Note and monitor erosion site.							
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	19.23	Rating **	M	Issue No.		2575			
LM End	19.23	Issue Type +	En	Location *		LS			
Category	Suppleme	ental	GPS Latitude/Longitude						
Calegory	Category					End			
Item	DWR UCI	IP Field Study		38.90502	29°	38.905029°			
пеш				-121.79007	76°	-121.790076°			
DWR ID									
	Comment Code								

#### Inspector Comment

FS\_ID:28506 DS\_ID:20087 EP\_NO: 550

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion on landside slope.Oil leaks from

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee, 4.8 feet below crown. Slant pump and gate valve in CM pump house on steel structure on berm. Water meter installed on pipe on the waterward slope. Concrete distribution box on landward side. (App. No. 550 - Hiatt) O&M Manual Sac 128, March 1960. New permit no. 17648GM- Van Ruiten Bros- June 24, 2003.

FS Date: 1/14/2014

LM Start	19.23	Rating **	М	Issue No.	2575 (cont)
LM End	19.23	Issue Type +	En	Location *	LS



WS view: slant pump in CM shed on levee berm. Oil leaks from the pump.

#### Photo 2 of 2: UCIP\_FA\_2016\_28506\_52522.jpg



LS view: surface erosion on landside levee slope.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	19.47	Rating **	М	Issue No.	2576					
LM End	19.47	Issue Type +	En	Location *	LS					
Category	Suppleme	ental	GPS Lat	ituc	le/Longitude					
Calegory				Start		End				
Item	DWR UCI	P Field Study		38.90703	3°	38.907033°				
пеш				-121.79294	3°	-121.792943 °				
DWR ID										
	Comment Code									

#### Inspector Comment

FS\_ID:28524 DS\_ID:20004 EP\_NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside. Two 3-inch conduit through the levee. Service box on pump platform. Pumping

plant was working during the field visit.

FIELD\_STRUCT\_DESC: 1 of 2: Two slant pumps supported by steel piling on the riverbank. 16 and 18-inches steel pipelines, asphalt coated inside and out and wrapped with asphalt saturated felt through the levee section to a concrete discharge box located landward of the landward levee toe. Pipes 1.5 feet below the crown. Siphon breakers in steel pipe risers on levee slope. (App. No. 15681)

FS Date: 1/14/2014

LM Sta	art	19.47	Rating **	М	Issue No.	2576 (cont)
LM Er	nd	19.47	Issue Type +	En	Location *	LS



WS view: pipe, walkway, slant pump, and steel platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28524\_52550.jpg



LS view: siphon breakers in steel pipe risers (bottom) on levee slope and concrete distribution (top) box on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	19.47	Rating **	М	Issue No.	2577					
LM End	19.47	Issue Type +	En	Location *	LS					
Category	Suppleme	ental	GPS Lat	ituc	le/Longitude					
Calegory				Start		End				
Item	DWR UCI	P Field Study		38.90702	8°	38.907028°				
пеш				-121.79295	9°	-121.792959°				
DWR ID										
	Comment Code									

#### Inspector Comment

FS\_ID:28927 DS\_ID:20022 EP\_NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside. Two 3-inch conduit through the levee. Service box on pump platform. Pumping

plant was working during the field visit.

FIELD\_STRUCT\_DESC: 2 of 2: Two slant pumps supported by steel piling on the riverbank. 18 and 16-inches steel pipelines, asphalt coated inside and out and wrapped with asphalt saturated felt through the levee section to a concrete discharge box located landward of the landward levee toe. Pipes 1.5 feet below the crown. Siphon breakers in steel pipe risers on levee slope. (App. No. 15681)

FS Date: 1/14/2014

LM Start	19.47	Rating **	М	Issue No.	2577 (cont)
LM End	19.47	Issue Type +	En	Location *	LS



WS view: pipe, walkway, slant pump, and steel platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28927\_53215.jpg



LS view: siphon breakers in steel pipe risers (bottom) on levee slope and concrete distribution (top) box on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

19.56	Rating **	М	Issue No.		2549				
19.56	Issue Type +	En	Location *		WS				
Earthen L	evee		GPS La	atitud	le/Longitude				
			Start		End				
Encroachi	ments		38.9065	65°	38.906565°				
		-121.7944	72°	-121.794472 °					
DWR ID DWR_RD1500_01_s _ 2015_2549									
Comment Code									
ment									
	Inspecto	or Comm	ent						
	Earthen L	19.56 Issue Type + Earthen Levee Encroachments  DWR_RD1500_01_s _ 201  Commoment	19.56 Issue Type + En Earthen Levee Encroachments  DWR_RD1500_01_s _ 2015_2549  Comment Cocoment	19.56         Issue Type +         En         Location *           Earthen Levee         GPS L         Start           Encroachments         38.9065         -121.7944           DWR_RD1500_01_s _ 2015_2549         Comment Code	19.56 Issue Type + En Location *  Earthen Levee GPS Latitud Start  Encroachments 38.906565 ° -121.794472 °  DWR_RD1500_01_s _ 2015_2549  Comment Code  ment				

## Photo 1 of 1 : FA\_2016\_RD1500\_189\_2549\_20160913\_00092.jpg

View of the equipment on the waterward side of the levee looking upstream. Spring 2015.

LM Start	19.62	Rating **	M	Issue No.		2550			
LM End	19.62	Issue Type +	En	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroach	ments		38.9063	875°	38.906375°			
item				-121.7956	611°	-121.795611°			
DWR ID	DWR_RD1	500_01_s _ 201	5_2550	'					
		Comn	nent Cod	de					
DE : Debri	S								
Inspector Comment									

# Photo 1 of 1 : FA\_2016\_RD1500\_189\_2550\_20160913\_00093.jpg

View of the debris pile and pipe on the crown of the levee looking upstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	19.87	Rating **	М	Issue No.		96		
LM End	19.87	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Animal Co	ontrol	38.9062	60°	38.906260 °			
пеш				-121.8001	29°	-121.800129°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_96							
		Comn	nent Cod	de				
A3 : No roccompact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and		
Inspector Comment								

No Photos

LM Start	21.26	Rating **	М	Issue No.		2551	
LM End	21.26	Issue Type +	En	Location *		LS	
Category	Suppleme	ental	GPS La	titud	e/Longitude		
Category				Start Er		End	
Item	DWR UCIP Field Study					38.914659	0
пеш				-121.8036	09°	-121.803609	٥
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:28527 DS\_ID:20070 EP\_NO: 11959A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Siphon breaker (obstructed) in CMP on landside

slope.Power pole on landside toe.

FIELD\_STRUCT\_DESC: 10-inch steel pipe through levee, 3.0 feet below crown with slant pump on steel platform. Siphon breaker (obstructed) in CMP on landside slope. A 6 foot by 6 foot concrete distribution box on landward side. (App. No. 11959A - Van Ruiten) O&M Manual Sac 128, March 1960.

FS Date: 1/14/2014



WS view: slant pump on steel platform on levee berm.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	21.26	Rating **	М	Issue No. 255		2551 (cont)	
LM End	21.26	Issue Type +	En	Location *	* LS		
Supplemental GPS Latitude/Lo				le/Longitude			
Calegory	Category					End	
Item	DWR UC	P Field Study		38.91465	9°	38.914659°	
пеш				-121.80360	9°	-121.803609°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28527 DS\_ID:20070 EP\_NO: 11959A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Siphon breaker (obstructed) in CMP on landside

slope. Power pole on landside toe.

FIELD\_STRUCT\_DESC: 10-inch steel pipe through levee, 3.0 feet below crown with slant pump on steel platform. Siphon breaker (obstructed) in CMP on landside slope. A 6 foot by 6 foot concrete distribution box on landward side. (App. No. 11959A - Van Ruiten) O&M

Manual Sac 128, March 1960.

FS Date: 1/14/2014

Photo 2 of 2 : U	JCIP_FA_2	2016_2852 <sup>-</sup>	7_52567	.jpg
G.				
			IIII	
	12/4	/////	11//	
and the second second		WALL TO		
1	17.41		#E / E	
11				
april and a second	1	<b>)</b>		
			57 3	1 / J
	- Y.	No.		
-2			150	學經濟

LS view: siphon breaker in CMP riser on levee slope (bottom) and concrete distribution box (top) on levee toe.

LM Start	21.30	Rating **	M	Issue No.		140		
LM End	21.58	Issue Type +	En	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitud					
Category			Start		End			
Item	Encroachments			38.9148	46°	38.916180 °		
item				-121.8036	92°	-121.808850 °		
DWR ID	DWR_RD1	500_01_f _ 201	6_140					
		Comn	nent Coo	le				
DT : Ditch								
Inspector Comment								
Old ditch at LS toe. Couldn't find records in levee log.								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	21.57	Rating **	М	Issue No.		97		
LM End	21.57	Issue Type +	Ma	Location *		WS		
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Encroachi	ments		38.9161	96°	38.916196°		
пеш				-121.8085	95°	-121.808595 °		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_97							
		Comn	nent Cod	de				
DE : Debri	S							
Inspector Comment								

No Photos

LM Start	21.58	Rating **	U	Issue No.		98			
LM End	21.58	Issue Type +	En	Location *		CR			
Category	GPS La	atitud	le/Longitude						
Category				Start		End			
Item	Encroach	ments		38.9161	80°	38.916180°			
item				-121.8088	50°	-121.808850 °			
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_98								
		Comn	nent Cod	de					
PI : Pipe									
	Inspector Comment								
Pipe open on both ends. No permit. Rebar and pipe on slope.									

LM Start	21.58	Rating **	U	Issue No.	98 (cont)
LM End	21.58	Issue Type +	En	Location *	CR



View of pipe on landside slope. Open on both ends. Less than a foot below the crown. Intended for drain hose go through the levee. Drain hose located nearby. Fall 2016.

Photo 2 of 3: FA\_2016\_RD1500\_189\_98\_20160926\_00239.jpg



View of pipe on waterward side. Fall 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2016**

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	21.58	Rating **	U	Issue No.		98 (cont)		
LM End	21.58	Issue Type +	En	Location *		CR		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachments			38.9161	80°	38.916180°		
пеш				-121.808850 ° -121.8088				
DWR ID DWR_RD1500_01_f _ 2016_98								
		Comn	nent Cod	de				
PI : Pipe								
Inspector Comment								
Pipe open on both ends. No permit. Rebar and pipe on slope.								

### Photo 3 of 3: FA\_2016\_RD1500\_189\_98\_20160926\_00240.jpg



Drain hose on LS slope. Fall 2016.

LM Start	21.58	Rating **	M	Issue No.		99								
LM End	21.58	Issue Type +	En	Location *		LS								
Category Earthen Levee			GPS Latitude/Longitude											
Category				Start		End								
Itom	Encroachments			38.916174°		38.916174°								
пеш				-121.808907 °		-121.808907 °								
DWR ID	DWR_RD1	500_01_f _ 201	6_99											
		Comn	nent Cod	de										
ST : Stairw	vay													
	Inspector Comment													
Pipe owne	r has dug	stairs to LS le	vee slop	e.		Pipe owner has dug stairs to LS levee slope.								

# Photo 1 of 1: FA\_2016\_RD1500\_189\_99\_20160926\_00241.jpg

View of stairs dug on landside slope. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	21.58	Rating **	М	Issue No.	2552			
LM End	21.58	Issue Type +	En	Location *	LS			
Supplemental				GPS Latitude/Longitude				
Category				Start		End		
Item	DWR UCI	P Field Study		38.91618	o°	38.916180°		
пеш					4 °	-121.808904°		
DWR ID								
Comment Code								

#### Inspector Comment

FS\_ID:28528 DS\_ID:20071 EP\_NO: 10063

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Water leaks near pump. Obstructed siphon breaker

in CMP on landside.Plant was working during field visit.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through levee 6.3 feet below crown. 1-1/2-inch conduit through levee, 6.5 feet below crown. Slant pump and gate valve on berm. Siphon breaker in 24-inch corrugated metal riser on landward slope. CMP standpipe on landside toe. Power pole and one anchor at landward toe. (ABO. No. 10063, 11/1974 - Nelson) O&M Manual Sac 128, March 1960.

FS Date: 1/14/2014

LM Start	21.58	Rating **	М	Issue No.	2552 (cont)
LM End	21.58	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28528\_52576.jpg



WS view: slant pump on steel platform on levee berm. Exposed steel pipe with gate valve also on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28528\_52575.jpg



WS view: leaky inlet pipe near pump platform.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	21.91	Rating **	М	Issue No.		2593
LM End	21.91	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	P Field Study		38.9166	06°	38.916606°
пеш				-121.8148	31 °	-121.814881 °
DWR ID						·

#### Inspector Comment

Comment Code

FS\_ID:50192 DS\_ID:20083 EP\_NO: 2895

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 09/20/2016 Inspection 09/20/2016-1100 for Permit No: 2895-1 performed by Oleg Yakimov and George Wylie of FPIIB. Photos show condition of pipe before it was removed and replaced. (K. Fazel - UCIP)01/14/2014: Obstructed siphon breaker. Plant was

working during field visit. (P. Amatya - DWR)
FIELD\_STRUCT\_DESC: \*REMOVED\* 12-inch steel irrigation pipe through levee, 5.8 feet below crown. 1.5-inch conduit through levee, 4 feet below crown. Pump and gate valve on bank. Switch panel on berm. Siphon breaker in 24-inch CM riser on landward slope. Discharges into 36-inch CM standpipe on landward side. Service pole at landward toe. Pumping Plant No. 3. (App. No. 10851, 2895 - George Van Ruiten). Pipe removed and replaced under Secondary Permit No. 2895-1, 2016 -Van Ruiten Bros (DSID 25472).

FS Date: 9/26/2016

LM Start	21.91	Rating **	М	Issue No.	2593 (cont)
LM End	21.91	Issue Type +	En	Location *	LS



WS view: slant pump on steel platform on levee berm.

Photo 2 of 2: UCIP\_FA\_2016\_50192\_52586.jpg



WS view: slant pipe and gate valve at the end of levee berm.

Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	22.73	Rating **	М	Issue No.		2553	
LM End	22.73	Issue Type +	En	Location *		LS	
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P Field Study		38.9197	17°	38.919717°	
item				-121.8291	13 °	-121.829113°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28583 DS\_ID:19995 EP\_NO: 10851

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Exposed conduit on both slopes of the levee. Plant was working during field visit. Water was leaking from pipe joint near

pump. Obstructed siphon breaker in CMP.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee, 6.2 feet below crown. Pump and gate valve on steel platform. Switch panel on berm. Siphon breaker in 24-inch CM riser on landward shoulder. Discharges into 36-inch CM standpipe at landward toe. 2-inch conduit through levee, 5.0 feet below crown. Service pole at landward toe. Pumping plant No. 2. (App. No. 10851, 2895 - Van Ruiten)

FS Date: 1/14/2014

LM Start	22.73	Rating **	М	Issue No.	2553 (cont)
LM End	22.73	Issue Type +	En	Location *	LS



WS view: slant pump on steel platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_28583\_52626.jpg



WS view: gate valve beneath slant pipe on levee berm. Water leaking from this pipe (marked).

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	23.65	Rating **	М	Issue No.		2559
LM End	23.65	Issue Type +	En	Location *		LS
Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.93024	12°	38.930242
пеш				-121.83495	56°	-121.834956
DWR ID						

#### Inspector Comment

Comment Code

FS\_ID:28586 DS\_ID:20072 EP\_NO: 2895

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Most of the pipe exposed on levee slopes.Leaky pump. Obstructed siphon breaker. Not found- Concrete headwall at landward toe.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation pipe through levee, 6.5 feet below crown. 1-1/2 inch conduit through levee, 4.0 feet below crown. Slant pump and control panel on steel structure on berm. Siphon breaker in 24-inch corrugated metal riser on landward shoulder. 36-inch CM standpipe at landward toe. Service pole at landward toe. Pumping-Plant No. 1. (App. No. 2895 - Van Ruiten) O&M Manual Sac 128, March 1960.

FS Date: 1/14/2014

LM Start	23.65	Rating **	М	Issue No.	2559 (cont)	
LM End	23.65	Issue Type +	En	Location *	LS	



WS view: slant pump on steel platform on levee berm. Oil leaks from the pump (marked). Exposed pipe on the berm.





LS view: siphon breaker in CMP riser on levee slope (bottom) and CM standpipe (top) on levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	23.71	Rating **	М	Issue No.		176
LM End	23.71	Issue Type +	En	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.9310	)45°	38.931045°
item	-121.834795 ° -121.8347					
DWR ID DWR_RD1500_01_s _ 2016_176						
		Comn	nent Cod	de		
DE : Debri	s					
			_			
		Inspecto	or Comm	nent		



View of the pipes along the toe of the landward side of the levee looking upstream. Spring 2016.

LM Start	23.77	Rating **	М	Issue No.		42	
LM End	23.77	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	ments		38.9318	38°	38.931838°	
пеш				-121.8344	37°	-121.834437 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_42			·	
		Comn	nent Cod	de			
BU : Buildi	ng						
		Inspecto	or Comm	nent			
Some equ	Some equipment at landside toe.						



View of the barn and equipment on the landward side of the levee looking downstream. Fall 2015.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

	1						
LM Start	24.17	Rating **	М	Issue No.		979	
LM End	24.31	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments 38.936419 °					38.938426°	
item				-121.8302	-121.829365°		
DWR ID	DWR_RD1	500_01_s _ 201	2_979				
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			
Concrete lined ditch located at the levee toe on the landward side of the levee.							



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

LM Start	24.31	Rating **	М	Issue No.		2560
LM End	24.31	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		38.9384	31°	38.938431 °
item				-121.8293	50°	-121.829350 °
DWR ID						

#### Inspector Comment

Comment Code

FS\_ID:28603 DS\_ID:24757 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Plant was working during field visit.Leaky pipe near

oump.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe 6.5 ft below crown; walkway to slant pump. Gate valve on berm. 24-in CM riser with siphon breaker and 4 ft x 7 ft concrete distribution box on landside toe.

(Source: Leve Log 1/1/1990 and Fileld visit 1/14/2014)

FS Date: 1/14/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28603\_52667.jpg



WS view: slant pump on steel platform at levee berm. Walkway, exposed pipe, and gate valve on the berm.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	24.31	Rating **	М	Issue No.	2560 (cont)		
LM End	24.31	Issue Type +	En	Location *	LS		
Supplemental GPS Latitude/Longit					le/Longitude		
Category				Start End			
Item	DWR UCI	P Field Study		38.9384	31 °	38.938431°	
пеш				-121.8293	50°	-121.829350°	
DWR ID	DWR ID						
	Comment Code						

#### Inspector Comment

FS\_ID:28603 DS\_ID:24757 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Plant was working during field visit.Leaky pipe near

pump.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe 6.5 ft below crown; walkway to slant pump. Gate valve on berm. 24-in CM riser with siphon breaker and 4 ft x 7 ft concrete distribution box on landside toe.

(Source: Leve Log 1/1/1990 and Fileld visit 1/14/2014)

FS Date: 1/14/2014



WS view: leaky pipe near pump platform. Pipe leaks from the joint.

LM Start	24.65	Rating **	U	Issue No.		100		
LM End	24.65	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee	GPS Latitude/Longitude					
Category				Start		End		
Item	Animal Control			38.9418	77°	38.941877°		
item				-121.8332	17°	-121.833217°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_100							
Comment Code								
A1 : Extern	ninate rod	ents and back	fill and c	compact or	grou	t burrows.		

Inspector Comment

#### Photo 1 of 1 : FA\_2016\_RD1500\_189\_100\_20160926\_00242.jpg



Rodent burrows on landside slope of the levee. Estimated more than 2 cub.ft of soil got out. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	24.76	Rating **	U	Issue No.		102	
LM End	24.76	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		38.9428	28°	38.942828 °	
item				-121.834811 °		-121.834811 °	
DWR ID DWR_RD1500_01_f _ 2015_102							
		Comn	nent Cod	le			
A1 : Exterr	minate rod	ents and back	fill and o	compact or	grou	it burrows.	
		Inspecto	or Comm	ent			

Photo 1 of 3: FA_	2016_RD150	0_189_102	2_20160926	_00245.jpg
			ما الله	
AND MALE AND ADDRESS OF THE PARTY OF THE PAR	# D # #			
The second				
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A Company				And Supplied
			09/2006	2010
		100		

A number of burrows was observed at this site on landward slope. Fall 2016.

24.76 Rating \*\* Issue No. 102 (cont) LM Start LM End 24.76 Issue Type + Location \* LS

Photo 2 of 3: FA\_2016\_RD1500\_189\_102\_20160926\_00251.jpg



Landside slope perspective view. Fall 2016.

LM Start	24.76	Rating **	U	Issue No.	102 (cont)
LM End	24.76	Issue Type +	Ма	Location *	LS





View of rodent hole on the landward side of the levee looking upstream. Spring 2016.

\* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS: Land Side N : Not Inspected/Rated N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	24.82	Rating **	U	Issue No.		101	
LM End	24.82	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		38.9435	10°	38.943510°	
пеш				-121.835431 °		-121.835431 °	
DWR ID DWR_RD1500_01_f _ 2016_101							
		Comn	nent Cod	de			
A1 : Exterr	minate rod	ents and back	fill and o	compact or	grou	it burrows.	
		Inspecto	or Comm	nent			

LM Start	24.82	Rating **	U	Issue No.	101 (cont)
	04.00	Jacus Type I	N/-	Location *	1.0



Number of burrows with significant amount of soil taken out was observed on LS slope of the levee. Fall 2016.

Photo 2 of 2: FA\_2016\_RD1500\_189\_101\_20160926\_00248.jpg



Landside slope perspective view. Fall 2016.

LM Start	24.88	Rating **	С	Issue No.		69	
LM End	24.88	Issue Type +	Ма	Location *		LS	
Category	Cotagoni Earthen Levee		GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Animal Co	ontrol		38.9443	40°	38.944340°	
item				-121.835790 °		-121.835790°	
DWR ID DWR_RD1500_01_f _ 2013_69							
		Comn	nent Cod	de			
A1 : Exterr	minate rod	ents and back	fill and o	compact or	grou	t burrows.	
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	24.98	Rating **	М	Issue No.		103		
LM End	24.98	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category			Start		End			
Item	Animal Co	ontrol		38.9458	38.945861 °			
пеш				-121.835964°		-121.835964°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_103							
		Comn	nent Cod	de				
	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
Inspector Comment								

No Photos

LM Start	25.49	Rating **	М	Issue No.		2589
LM End	25.49	Issue Type +	En	Location *		LS
Category			GPS La	titud	e/Longitude	
Calegory	ory			Start		End
Itom	DWR UCI	IP Field Study		38.9528	)3°	38.952803°
item	tem			-121.8376	18°	-121.837618°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:41728 DS\_ID:20074 EP\_NO: 8765

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Burried Concrete headwall on landside toe. Should verify pipe has been properly abandoned. Utility tag plate on waterside

shoulder.No pipe found.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 4 foot by 4 foot reinforced concrete pipe through levee, 10 feet below the crown. App. No. 8765 has been approved to sleeve a 20-inch pipe through existing pipe from a new pumping facility. (App. No. 8765 & 9175 - Lewis) O&M Manual Sac 128, March 1960. FS Date: 1/15/2014

Photo 1 of 2: UCIP\_FA\_2016\_41728\_52673.jpg



WS view: utility tag plate on waterside shoulder. No pipe found.

LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	25.49	Rating **	М	Issue No.	2	2589 (cont)
LM End	25.49	Issue Type +	En	Location *		LS
Category	Suppleme	ental	ntal GPS Latitude/Longitu			le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.9528	03°	38.952803°
пеш				-121.8376	18°	-121.837618 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:41728 DS\_ID:20074 EP\_NO: 8765

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Burried Concrete headwall on landside toe. Should verify pipe has been properly abandoned. Utility tag plate on waterside shoulder. No pipe found.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 4 foot by 4 foot reinforced concrete pipe through levee, 10 feet below the crown. App. No. 8765 has been approved to sleeve a 20-inch pipe through existing pipe from a new pumping facility. (App. No. 8765 & 9175 - Lewis) O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

## Photo 2 of 2 : UCIP\_FA\_2016\_41728\_52672.jpg

LS view: concrete headwall on landside toe. No pipe found.

LM Start	25.68	Rating **	U	Issue No.		104		
LM End	25.68	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category			Start End					
Item	Animal Co	mal Control			45°	38.955445°		
item				-121.8374	73°	-121.837473°		
DWR ID DWR_RD1500_01_f _ 2016_104								
	Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

#### Photo 1 of 1 : FA\_2016\_RD1500\_189\_104\_20160926\_00253.jpg



More than 2 cu.ft. of soil was observed around burrows on LS slope of the levee. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

25.98	Rating **	С	Issue No.		179
25.98	Issue Type +	En	Location *		LS
Earthen L	evee		GPS La	atitud	le/Longitude
			Start		End
Encroachi	ments		38.9582	83°	38.958283 °
			-121.8332	31 °	-121.833231 °
DWR_RD1	500_01_s _ 201	6_179			
	Comn	nent Coc	de		
ngs					
	Inspecto	or Comm	nent		
	25.98 Earthen L Encroachi DWR_RD1:	25.98 Issue Type + Earthen Levee Encroachments  DWR_RD1500_01_s _ 201  Comm	25.98 Issue Type + En  Earthen Levee  Encroachments  DWR_RD1500_01_s _ 2016_179  Comment Coonings	25.98 Issue Type + En Location *  Earthen Levee GPS La  Start  Encroachments 38.9582  -121.8332  DWR_RD1500_01_s _ 2016_179  Comment Code	25.98   Issue Type +   En   Location *    Earthen Levee   GPS Latitud   Start   Encroachments   38.958283 °   -121.833231 °    DWR_RD1500_01_s _ 2016_179   Comment Code   Indeptition of the code   Ind

No Photos

LM Start	26.52	Rating **	М	Issue No.		2564
LM End	26.52	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.9649	15°	38.964915°
пеш				-121.8336	75°	-121.833675°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:28629 DS\_ID:20014 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DESC: Abandoned 24-inch pipe through levee, 7.1 feet below the crown, slant pump on WS. O&M Manual Sac 128, March

1960. (ABO No. 10057) FS Date: 1/15/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28629\_52709.jpg



WS view: abandoned 24" and 30" steel pipe on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	26.52	Rating **	М	Issue No.	2	2564 (cont)
LM End	26.52	Issue Type +	En	Location *	LS	
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start	End	
Item	DWR UCI	VR UCIP Field Study		38.9649	15 °	38.964915°
item				-121.8336	75 °	-121.833675°
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:28629 DS\_ID:20014 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DESC: Abandoned 24-inch pipe through levee, 7.1 feet below the crown, slant pump on WS. O&M Manual Sac 128, March

1960. (ABO No. 10057) FS Date: 1/15/2014



LS view: abandoned CMP risers on levee toe.

#### 26.52 Rating \*\* Issue No. 2563 LM Start Μ Issue Type + Location \* LS LM End 26.52 En Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 38.964931° 38.964931 Item -121.833682 ° -121.833682° DWR ID

#### Comment Code

#### Inspector Comment

FS\_ID:28628 DS\_ID:20013 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DESC: Abandoned 30-inch pipe through levee, 7.1 feet below the crown, pump on WS. O&M Manual Sac 128, March

1960. (ABO No. 10057) FS Date: 1/15/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28628\_52705.jpg



WS view: abandoned 24" and 30" steel pipe on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	26.52	Rating **	М	Issue No.	2563 (cont)			
LM End	26.52	Issue Type +	En	Location *	LS			
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory			Start			End		
Item	DWR UC	P Field Study		38.96493	81 °	38.964931 °		
пеш				-121.83368	32 °	-121.833682°		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:28628 DS\_ID:20013 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DESC: Abandoned 30-inch pipe through levee, 7.1 feet below the crown, pump on WS. O&M Manual Sac 128, March

1960. (ABO No. 10057) FS Date: 1/15/2014



LS view: abandoned CMP risers on levee toe.

#### 26.74 Rating \*\* Issue No. 2565 LM Start Μ Issue Type + Location \* LM End 26.74 En LS Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 38.968093° 38.968093 Item -121.833708° -121.833708° DWR ID

#### Comment Code

#### Inspector Comment

FS\_ID:28631 DS\_ID:20015 EP\_NO: 10052

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breaker. Leaky pump.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through levee, 7.1 feet below crown. 2-inch conduit through levee, 5.5 feet below crown. Wood walkway to slant pump and gate valve on wooden pump platform mounted on steel pile structure on berm. Siphon breaker in 24-inch CM riser on landward slope. Meter pole at landward toe. (ABO No. 10052 - Lamb) (RM 112.29) O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

#### Photo 1 of 2: UCIP\_FA\_2016\_28631\_52720.jpg



WS view: slant pump and gate valves on wooden platform at levee berm. Wooden walkway to the pump.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	26.74	Rating **	М	Issue No.	:	2565 (cont)	
LM End	26.74	Issue Type +	En	Location *	LS		
Supplemental			GPS Latitude/Longitude				
Calegory	"y			Start		End	
Item	DWR UCIP Field Study			38.96809	)3 °	38.968093°	
пеш				-121.83370	)8 °	-121.833708°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:28631 DS\_ID:20015 EP\_NO: 10052

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breaker. Leaky pump.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through levee, 7.1 feet below crown. 2-inch conduit through levee, 5.5 feet below crown. Wood walkway to slant pump and gate valve on wooden pump platform mounted on steel pile structure on berm. Siphon breaker in 24-inch CM riser on landward slope. Meter pole at landward toe. (ABO No. 10052 - Lamb) (RM 112.29) O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

Photo 2 of 2:	UCIP_FA_2016_28631_52719.jpg	
Winds appropriate		
过程)		
	A STATE OF THE STA	

LS view: siphon breaker in CMP riser on levee slope (bottom) and concrete distribution box on levee toe.

LM Start	26.99	Rating **	М	Issue No.	105		
LM End	27.28	Issue Type +	En	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Encroach	ments		38.970964°		38.972455°	
item				-121.8309	28°	-121.826024°	
DWR ID DWR_RD1500_01_f _ 2016_105						·	
Comment Code							

#### AT: Agricultural tilling

#### Inspector Comment

Cut into toe at landside due to agricultural activity.

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_105\_20160926\_00254.jpg



Levee toe on landside has been cut due to agricultural activity. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	27.31	Rating **	М	Issue No.		983	
LM End	27.44	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.9725	52°	38.972924°	
item				-121.8255	74°	-121.823198°	
DWR ID DWR_RD1500_01_s _ 2015_983							
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	ent			

## Photo 1 of 1 : FA\_2016\_RD1500\_189\_983\_20160913\_00085.jpg

View of the ditch on the landward side of the levee looking downstream.

Spring 2016.

LM Start	28.23	Rating **	М	Issue No.		38	
LM End	29.23	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory						End	
Item	Encroach	ments		38.9831	19°	38.988538°	
item				-121.8199	23°	-121.806445 °	
DWR ID DWR_RD1500_01_s _ 2012_38							
		Comn	nent Cod	de			
DT : Ditch							
Inspector Comment							



View of the dtich on the landward side of the levee looking upstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	28.94	Rating **	A/W	Issue No.		84	
LM End	29.17	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.9880	72°	38.988572°	
пеш				-121.8117	'37 °	-121.807520 °	
DWR ID DWR_RD1500_01_s _ 2012_84							
		Comn	nent Cod	de			
V8 : Enviro	onmental F	Requirements.					
		Inspecto	or Comm	nent			

03/10/2016
View of the revegetation site on the waterward side of the levee looking upstream. Spring 2016.

Photo 1 of 2: FA\_2016\_RD1500\_189\_84\_20160913\_00050.jpg

LM Start	28.94	Rating **	A/W	Issue No.	84 (cont)
LM End	29.17	Issue Type +	Ma	Location *	WS



Sign for the revegetation site. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	29.91	Rating **	М	Issue No.		2595	
LM End	29.91	Issue Type +	En	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Category	Category					End	
Item	DWR UCIP Field Study			38.99300	6°	38.993006°	
пеш				-121.79602	5°	-121.796025°	
DWR ID							

#### Inspector Comment

UCIP Comments: 08/29/2016: Found no evidence of leakage or

Comment Code

FS\_ID:50194 DS\_ID:20113 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/29/2016

subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel -UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker. Water leaking from pipe near distribution box on landside levee toe. Overhead powerline. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation pipe through the levee, 5 feet below the crown. Siphon breaker in a 24-inch corrugated metal (CM) riser on the landside (LS) shoulder. Another 20-inch steel irrigation pipe through the levee at this location, 5 feet below the crown. Another siphon breaker in a 24-inch CM riser on the LS shoulder. Slant pumps in a CM pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Flap gates in a 9.7foot by 10.6-foot (outside dimensions) concrete distribution box at the LS toe. (Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - Larner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 30.29)].

LM Start	29.91	Rating **	М	Issue No.	2595 (cont)
LM End	29.91	Issue Type +	En	Location *	WS



WS view: two slant pumps on wooden platform on levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_50194\_51833.jpg



LS view: CMPs with leaky siphon breakers. Slope erosion and excessive vegetation on levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	29.91	Rating **	М	Issue No.		2599		
LM End	29.91	Issue Type +	En	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UCI	P Field Study		38.9930	06°	38.993006°		
пеш				-121.796025 °		-121.796025°		
DWR ID								

#### Comment Code

#### Inspector Comment

FS\_ID:50201 DS\_ID:20084 EP\_NO: 10054 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker. Water leaking from pipe near distribution box on landside levee toe. Overhead powerline. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 1 of 2: 20-inch steel irrigation pipe through the levee, 5 feet below the crown. Siphon breaker in a 24-inch corrugated metal (CM) riser on the landside (LS) shoulder. Another 16-inch steel irrigation pipe through the levee at this location, 5 feet below the crown. Another siphon breaker in a 24-inch CM riser on the LS shoulder. Slant pumps in a CM pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Flap gates in a 9.7-foot by 10.6-foot (outside dimensions) concrete distribution box at the LS toe. (Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - Larner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960 (HLM 30.29)]. FS Date: 8/29/2016

LM Start	29.91	Rating **	М	Issue No.	2599 (cont)
LM End	29.91	Issue Type +	En	Location *	WS



WS view: slant pumps and control boxes on steel platform at levee berm.

#### Photo 2 of 2: UCIP\_FA\_2016\_50201\_52854.jpg



LS view: siphon breakers in CMP riser on levee slope and distribution box on levee toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	30.07	Rating **	М	Issue No.		2594		
LM End	30.07	Issue Type +	En	Location *	WS			
Category	Category Supplemental				GPS Latitude/Longitude			
Category				Start		End		
Item	DWR UC	IP Field Study		38.99498	38°	38.994988 °		
пеш				-121.79448	34°	-121.794484°		
DWR ID								

Comment Code

#### Inspector Comment

FS\_ID:50193 DS\_ID:20107 EP\_NO: 6169

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Pipe and pump are leaking oil. Could not find evidence of any water leak. Field hand may have spilled oil as there is a puddle of oil beneath the pump. Crossing downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014: Leaky pump and excessive vegetation observed along pipe alignment on waterside slope of the levee. It needs more investigations. May have new permit for slant pump. (P. Amatya - DWR)

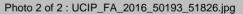
FIELD\_STRUCT\_DESC: 30-inch reinforced concrete-encased steel irrigation pipe through the levee, 15.5 feet below the crown. Slant pump and switch panel on steel pile structure at edge of the berm. Slide gate in a 2.5-foot by 3.5-foot (inside dimensions) concrete box on the berm. 6-foot by 8-foot concrete distribution box at the landside (LS) toe. 2-inch conduit through the levee, 2.5 feet below the crown. (Permit No. 6169, 1968 - Butler). Pipe through levee was initially installed in 1952. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 128, March 1960 (HLM 30.46)]. FS Date: 8/29/2016

 LM Start
 30.07
 Rating \*\*
 M
 Issue No.
 2594 (cont)

 LM End
 30.07
 Issue Type +
 En
 Location \*
 WS



WS view: leaky slant pump on levee berm.





WS view: concrete surge box with slide gate on levee berm.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	30.22	Rating **	М	Issue No.		45		
LM End	30.22	Issue Type +	En	Location *		LS		
Catagoria Earthen Levee			GPS La	atitud	e/Longitude			
Category			Start		End			
Vegetation				38.9970	27°	38.997027°		
пеш				-121.794755 °		° -121.794755°		
DWR ID DWR_RD1500_01_s _ 2012_45								
Comment Code								
V6 : Lands	scaping							
Inspector Comment								



View of the groundcover on the landward side of the levee looking downstream. Spring 2016.

LM Start	30.60	Rating **	A/W	Issue No.	22		
LM End	30.75	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2015 USACE Erosion Survey,			38.999745°		39.001413°	
itein	DRAFT			-121.800898 °		-121.802889 °	
DWR ID DWR_RD1500_01_s _ 2016_22							
Comment Code							

#### Inspector Comment

2000 - Eroding, vertical berm slope over a vertical cohesive toe; slow erosion but getting close to the toe. 2002 - Erosion is getting close to the levee, still eroding with some new small slumps. 2004 - Some minor new erosion. 2006 - Some new erosion, cleaned off older scars and slump faces. 2008 - New, small, partial rotational failure. 2011 - Some new minor erosion. 2015: No observed changes. [2015 Site ID: SAC\_116-0\_L]

#### Photo 1 of 1: FA\_2016\_RD1500\_189\_22\_20160913\_00019.jpg



USACE 2013 Photo #1

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	30.87	Rating **	М	Issue No.	2582			
LM End	30.87	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Category						End		
Item	DWR UC	P Field Study		39.00296	o°	39.002960 °		
пеш				-121.80373	6°	-121.803736 °		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:28144 DS\_ID:20000 EP\_NO: 15916

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion due to leaky pressure breaker on

landside slope.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through levee. Siphon breaker in 24-inch CM riser on landward slope. Discharges into 6 foot by 8 foot I.D. concrete distribution box at landward toe. (App. No. 15916 - Butler) 18-inch replaced original 12-inch pipe (10034 - Butler) FS Date: 1/15/2014

LM Start	30.87	Rating **	М	Issue No.	2582 (cont)
LM End	30.87	Issue Type +	En	Location *	WS



WS view: pump in CM pump house on levee shoulder. Looks abandoned.



LS view: obstructed and leaked pressure breaker in CMP on levee slope.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	30.94	Rating **	A/W	Issue No.	15		
LM End	31.60	Issue Type +	Ma	Location *		WS	
Category			GPS Latitude/Longitude				
Category				Start		End	
Item		CE Erosion S	Survey,	39.0033	01°	39.006072°	
пеш	DRAFT			-121.8050	24°	-121.815926°	
DWR ID DWR_RD1500_01_s _ 2016_15							
Comment Code							

#### Inspector Comment

2003 - New sedimentation and some new small toe scallops at the upstream end; downstream end has some new erosion. 2004 - Some new erosion at the toe and upper bank and some small new rotational failures (mainly minor, except at the downstream end). 2007 - Some new slumps. 2009 - Some new scallops and site was extended upstream. 2010 - New deposition along upstream end of site, however there is also new erosion throughout the site. Site seems to be worsening, and eroding fast. Large habitat for bank swallows. 2011 -Some new minor erosion. 2012 - Minor new erosion. 2015: No observed changes. [2015 Site ID: SAC\_116-5\_L]

### Photo 1 of 1: FA\_2016\_RD1500\_189\_15\_20160913\_00014.jpg



USACE 2013 Photo #1

LM Start	31.54	Rating **	A/W	Issue No.	86				
LM End	31.54	Issue Type +	En	Location *	LS				
Category Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Underseepage Relief Wells				87°	39.006687°			
item				-121.814967 °		-121.814967°			
DWR ID	DWR_RD1	500_01_s _ 201	6_86						
		Comn	nent Cod	de					
	Inspector Comment								

#### Photo 1 of 2: FA\_2016\_RD1500\_189\_86\_20160913\_00052.jpg



The control unit for pizometers installed in 2012, photo taken spring 2012.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	31.54	Rating **	A/W	Issue No.	86 (cont)			
LM End	31.54	Issue Type +	En	Location *	LS			
Category	evee	GPS La	atitud	le/Longitude				
Calegory				Start		End		
Item	Undersee	page Relief W	/ells	39.0066	87°	39.006687°		
item	-121.814967 ° -121.814967							
DWR ID DWR_RD1500_01_s _ 2016_86								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				

#### Photo 2 of 2 : FA\_2016\_RD1500\_189\_86\_20160913\_00053.jpg



View of the pizometer on the landward side of the levee. Spring 2016.

LM Start	31.56	Rating **	С	Issue No.		188		
LM End	31.56	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		39.0066	41 °	39.006641°		
пеш				-121.8152	19°	-121.815219°		
DWR ID	DWR ID DWR_RD1500_01_s _ 2016_188							
		Comn	nent Cod	de				
BU : Buildi	ng							
		Inspecto	or Comm	nent				
Bee hives	Bee hives are at the toe of the levee.							

No Photos

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	31.61	Rating **	М	Issue No.	2581		_	
LM End	31.61	Issue Type +	En	Location *	LS			
Category				GPS Latitude/Longitude				
Calegory	у			Start		End		
Item	DWR UCI	P Field Study		39.00648	34 °	39.006484	0	
пеш				-121.81616	88°	-121.816168	0	
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:28143 DS\_ID:20077 EP\_NO: 9657

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. May need proper

abondonement.Overhead power line.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch diameter steel pipe through levee, 15.0 feet below crown. Pump on elevated structure. Slide gate in riser, concrete surge box on waterward slope. Switch panel on berm. (App. Nos. 13536 & 13941 - Niechen 10/82) Discharges into 36-inch I.D. concrete standpipe on landward side. (App. No. 9657 ABO No. 10030 - Bell) O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

LM Start	31.61	Rating **	М	Issue No.	2581 (cont)
LM End	31.61	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28143\_51805.jpg



WS view: concrete surge box on levee slope.

#### Photo 2 of 2: UCIP\_FA\_2016\_28143\_51804.jpg



WS view: abandoned walkway, pipe, and pump on river bank.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

32.42	Rating **	М	Issue No.		60		
32.57	Issue Type +	En	Location *		LS		
Category Earthen Levee			GPS La	atitud	le/Longitude		
			Start		End		
Encroachments			39.0137	49°	39.015620°		
			-121.8250	-121.823461 °			
DWR ID DWR_RD1500_01_s _ 2012_60							
	Comn	nent Cod	de				
	Inspecto	or Comm	nent				
Ditch is located at the toe of the levee.							
	32.57 Earthen L Encroachi DWR_RD1:	32.57 Issue Type + Earthen Levee Encroachments  DWR_RD1500_01_s _ 201	32.57 Issue Type + En  Earthen Levee  Encroachments  DWR_RD1500_01_s _ 2012_60  Comment Coc  Inspector Comm	32.57 Issue Type + En Location *  Earthen Levee GPS La  Start  Encroachments 39.0137 -121.8250  DWR_RD1500_01_s _ 2012_60  Comment Code  Inspector Comment	32.57 Issue Type + En Location *  Earthen Levee		



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

LM Start	32.55	Rating **	М	Issue No.		Issue No.		2578
LM End	32.55	Issue Type +	En	Location *		LS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	DWR UCIP Field Study			77°	39.015277°		
item				-121.8237	35°	-121.823735°		
DWR ID								

#### Inspector Comment

Comment Code

FS\_ID:28943 DS\_ID:20018 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe leaks near pump through a hole in the pipe. Needs repair.An electric conduit through the levee. Concrete distribution box on landside levee toe. Slide gate in CMP on waterside

FIELD\_STRUCT\_DESC: 30-inch pipe and electric conduit through levee, 14.3 feet below the crown, Pump and headwall on waterside. Slide gate in CMP on waterside slope. Electric control box on waterside. Concrete distribution box on landside levee toe. O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

# Photo 1 of 2: UCIP\_FA\_2016\_28943\_53222.jpg

WS view: power control panel and CMP riser with slide gate on levee slope.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	32.55	Rating **	М	Issue No.	2	2578 (cont)		
LM End	32.55	Issue Type +	En	Location *	LS			
Supplemental				GPS Latitude/Longitude				
Calegory	Category		Start		End			
Item	DWR UCI	DWR UCIP Field Study			7°	39.015277	0	
пеш				-121.82373	85 °	-121.823735	0	
DWR ID								

#### Inspector Comment

Comment Code

FS\_ID:28943 DS\_ID:20018 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe leaks near pump through a hole in the pipe. Needs repair.An electric conduit through the levee. Concrete distribution box on landside levee toe. Slide gate in CMP on waterside slope.

FIELD\_STRUCT\_DESC: 30-inch pipe and electric conduit through levee, 14.3 feet below the crown, Pump and headwall on waterside. Slide gate in CMP on waterside slope. Electric control box on waterside. Concrete distribution box on landside levee toe. O&M Manual Sac 128, March 1960.

March 1960. FS Date: 1/15/2014



WS view: pump on river bank protected by concrete headwall. Leaky pipe near pump.

#### Rating \*\* Issue No. 32.96 Μ 46 LM Start Issue Type + Location \* LS 32.96 En LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.020550° 39.020550° Item -121.820315 ° -121.820315 DWR ID DWR\_RD1500\_01\_s \_ 2012\_46 Comment Code BU: Building

Inspector	Comment
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#### Photo 1 of 1 : FA\_2016\_RD1500\_189\_46\_20160913\_00035.jpg



The building is within the easement of the levee toe.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM End Category	32.98	Issue Type +				107	
		issue Type +	Ма	Location *		LS	
Calegory	Earthen L	Earthen Levee			atitud	e/Longitude	
				Start		End	
ltem /	Animal Co	ntrol		39.0208	74°	39.020874°	
ILEIII				-121.8202	66 °	-121.820266 °	
DWR ID DWR_RD1500_01_f _ 2016_107							
		Comn	nent Cod	le			
A3 : No rod compact or		e, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	ent			



View of rodent burrows on landside slope. Fall 2016.

LM Start	32.99	Rating **	М	Issue No.		106		
LM End	32.99	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory		Start		End				
Item	Erosion / Bank Caving			39.0210	16°	39.021016°		
пеш				-121.8202	61 °	-121.820261 °		
DWR ID DWR_RD1500_01_f _ 2016_106								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.		
Inspector Comment								



View of erosion site on LS slope of the levee. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	33.13	Rating **	М	Issue No.		2580	
LM End	33.13	Issue Type +	En	Location *	LS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.0229	38 °	39.022938 °	
пеш				-121.8207	17°	-121.820717 °	
DWR ID							

Comment Code

Inspector Comment

FS\_ID:28953 DS\_ID:20080 EP\_NO: 5617

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm.Two 16-inch steel pipes (looks new). Leaky pipe near pump.Plant was working during field visit.Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 1 of 2. Two 16-inch steel irrigation pipes and conduit through levee, 19.0 feet below crown. Two slant pumps on elevated pump platform on waterside. Gate valves and concrete headwall at landward berm. Meter pole at toe. Discharges into landside ditch. 1-3/4 conduit through levee. (App. No. 5617- Oji Bros.) O&M Manual Sac 128, March 1960.

FS Date: 1/15/2014

LM Start	33.13	Rating **	М	Issue No.	2580 (cont)
LM End	33.13	Issue Type +	En	Location *	LS

#### Photo 1 of 2: UCIP\_FA\_2016\_28953\_53256.jpg



WS view: slant pumps on steel platform in shed on berm.





WS view: closer view of slant pumps on steel platform in shed on berm.

#### Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	09/20/2016 09/21/2016	Oleg Yakimov

LM Start	33.13	Rating **	М	Issue No.		2579	
LM End	33.13	Issue Type +	En	Location *	Location *		
Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.02295	6 °	39.022956	0
пеш				-121.82071	6°	-121.820716	0
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:28952 DS\_ID:24758 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm.Two 16-inch steel pipes (looks new). Leaky pipe near pump.Plant was working during field visit.Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 2 of 2. Two 16-inch steel irrigation pipe through the levee. Two slant pumps on steel platform and under the shed. Two air vents on waterside levee shoulder. Two pipes with gate valves discharge water into irrigation ditch. Service pole on landside toe. Previously only a 30-inch steel pipe through the levee and slide gate in CMP riser on waterside.

FS Date: 1/15/2014

LM Start	33.13	Rating **	М	Issue No.	2579 (cont)
LM End	33.13	Issue Type +	En	Location *	LS



WS view: pump platform and shed on levee berm.



WS view: two slant pumps on steel platform at waterside berm.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

#### **Unit Cover Sheet**

#### Fall 2016 Levee Inspection Results

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles
Unit No. 02 Sutter Bypass	Right	20.72

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	3/10/2016 - 3/10/2016		9/21/2016 - 9/21/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By			Pavel Kazi DWR	

<sup>\*</sup> Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	09/21/2016 09/21/2016	Oleg Yakimov

LM Start	0.00	Rating **	М	Issue No.		12	
LM End	0.00	Issue Type +	Ma	Location *	WS		
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroach	ments		38.7611	21 °	38.761121 °	
item				-121.6745	92°	-121.674592 °	
DWR ID DWR_RD1500_02_s _ 2012_12							
		Comn	nent Cod	de			
EQ : Equip	ment						
		Inspecto	or Comm	nent			

#### Photo 1 of 1: FA\_2016\_RD1500\_190\_12\_20160913\_00005.jpg



View of the equipment on the levee crown looking upstream. Spring 2016.

LM Start	1.46	Rating **	Α	Issue No.		1	
LM End	1.46	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory						End	
Item	Vegetatio	n		38.7776	60°	38.777660°	
item			-121.6581	66°	-121.658166°		
DWR ID DWR_RD1500_02_f _ 2016_1							
		Comn	nent Cod	de			
V1 : Contre		rass and wee	eds on th	e levee slo	pes a	and	
		Inspecto	or Comm	nent			
Acceptable vegetation							

#### Photo 1 of 1: FA\_2016\_RD1500\_190\_1\_20160926\_00010.jpg



Acceptable vegetation on both levee slopes. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	09/21/2016 09/21/2016	Oleg Yakimov

				II.			
LM Start	9.73	Rating **	М	Issue No.		19	
LM End	9.73	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroach	ments		38.8916	30°	38.891630°	
item				-121.6363	93°	-121.636393 °	
DWR ID DWR_RD1500_02_s _ 2016_19							
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			

#### Photo 1 of 1: FA\_2016\_RD1500\_190\_19\_20160913\_00009.jpg



View of the fallen tree on the waterward side of the levee looking downstream. Spring 2016.

LM Start	14.13	Rating **	U	Issue No.		4		
LM End	14.13	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Undersee	page Relief W	/ells	38.9476	28°	38.947628°		
item				-121.6697	'64 °	-121.669764°		
DWR ID	DWR_RD1	500_02_s _ 201	2_4					
		Comn	nent Cod	de				
	Inspector Comment							
Concrete pad and PVC underneath is broken.								

#### Photo 1 of 3: FA\_2016\_RD1500\_190\_4\_20160926\_00012.jpg



View of underseepage relief well. Concrete pad as well as PVC pipes underneath are destroyed apparently by an attempt to pull out the head of the well. Fall 2016.

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	09/21/2016 09/21/2016	Oleg Yakimov

11100	4442	Rating **	U	Issue No.		4 (cont)		
LM Start	14.13	Rating	U	issue ivo.		4 (cont)		
LM End	14.13	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Undersee	page Relief W	/ells	38.9476	28°	38.947628°		
item				-121.6697	64°	-121.669764°		
DWR ID	DWR ID DWR_RD1500_02_s _ 2012_4							
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
Concrete p	ad and P\	/C underneat	h is brok	en.				

Ма

Issue No.

Location \*

4 (cont)

LS

Rating \*\*

Issue Type +

LM Start

LM End

14.13

14.13

Photo 2 of 3 : FA_2016_RD1500_190_4_20160926_00011.jpg
The same of the sa
A. The second se
A CONTRACTOR OF THE PARTY OF TH
08//21//2016

Another view of damaged well. Fall 2016.

#### Photo 3 of 3: FA\_2016\_RD1500\_190\_4\_20160913\_00001.jpg



View of the relief well at historical boil 12. Fall 2015.

LM Start	14.22	Rating **	М	Issue No.		2	
LM End	14.22	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Encroach	ments		38.9486	50°	38.948650°	
item			-121.670842°		-121.670842°		
DWR ID DWR_RD1500_02_f _ 2016_2							
		Comn	nent Cod	de			
PR : Pruni	ngs						
Inspector Comment							



View of WS slope of the levee. Fall 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	09/21/2016 09/21/2016	Oleg Yakimov

LM Start	14.47	Rating **	A/W	Issue No.		11
LM End	14.47	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Undersee	page Relief W	/ells	38.9514	13°	38.951413°
item				-121.673856 °		-121.673856°
DWR ID DWR_RD1500_02_s _ 2012_11						
		Comn	nent Cod	de		
		la a a a a t	0			
		Inspecto	or Comm	ient		



A relief well at historical boil 16. Fall 2015.

LM Start	18.17	Rating **	A/W	Issue No.		13	
LM End	18.17	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Undersee	page Relief W	/ells	38.9870	31°	38.987031 °	
пеш				-121.725049°		-121.725049°	
DWR ID DWR_RD1500_02_s _ 2012_13							
		Comn	nent Cod	de			
			_				
		Inspecto	or Comm	nent			

LM Start	18.17	Rating **	A/W	Issue No.	13 (cont)
LM End	18.17	Issue Type +	Ma	Location *	LS

#### Photo 1 of 2 : FA\_2016\_RD1500\_190\_13\_20160913\_00006.jpg



Two of four drains on the landward side of the levee. Fall 2015.

Photo 2 of 2: FA\_2016\_RD1500\_190\_13\_20160913\_00007.jpg



View of the 4 drains at the levee toe on the landward side. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2016

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	09/21/2016 09/21/2016	Oleg Yakimov

LM Start	18.41	Rating **	A/W	Issue No.	15		
LM End	18.41	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Undersee	page Relief W	/ells	38.9897	'10 °	38.989710°	
Item				-121.727691 °		-121.727691 °	
DWR ID DWR_RD1500_02_s _ 2015_15							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			

Photo 1 of 1 : FA\_2016\_RD1500\_190\_15\_20160913\_00008.jpg



View of the toe drainage at the landward toe berm. Fall 2015.

LM Start	18.55	Rating **	С	Issue No.		6	
LM End	18.55	Issue Type +	Ma	Location *	WS		
Catagory	Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Itom	ltem Encroachments			38.991454°		38.991454°	
item				-121.7291	45°	-121.729145°	
DWR ID	DWR_RD1	500_02_s _ 201	6_6				
Comment Code							
TR : Tree	or limb						

Inspector Comment

No Photos

LM Start	19.76	Rating **	С	Issue No.		5	
LM End	19.76	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Category			Start		End		
Item	Encroachments			39.007876°		39.007876°	
item				-121.736459 °		-121.736459°	
DWR ID	DWR_RD1500_02_s _ 2016_5						
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							
Tree has f	allen on th	e waterward s	lope.				

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement